MOTOR MAGAZINE'S

Canadian Service Data Book

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1951

(Models 1941-1950)

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of

MOTOR MAGAZINE'S

CANADIAN SERVICE DATA BOOK

P – Pilot flight
L – to load
T – to power & Eat

A complete service reference for the automotive mechanic, containing manufacturers' specifications on tune-up and maintenance for all passenger car makes and models.

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ENGINE SPECIFICATIONS

Make and Model	Year	No. Cylinders and Valve Arrangement	Bore and Stroke	Compression Ratio—Standard	Cranking Speed (R.P.M.)	Compression Pressure at Cranking Speed (lbs.)
ANGLIA (English)						
Four Cylinder	'49	4-L	2.5x3.64	6.16	80	104°
Four Cylinder	'50	4-L	2.5x3.64	6.16	80	104°
AUSTIN (English)						
A-40 Dev & Dor	'48	4-I	2.578x3.5	7.2	225	120–125
A-40 Dev & Dor	'49	4-I	2.578x3.5	7.2	225	120–125
A-40 Dev & Dor	'50	4-I	2.578x3.5	7.2	225	120–125
BUICK						
Special 44	'41	8-I	3 3/16 x 4 1/8	6.50	—	142
Super 45	'41	8-I	3 3/16 x 4 3/8	7.00	—	148
Century 46	'41	8-I	3 7/16 x 4 5/16	7.00	—	151
Roadmaster 47	'41	8-I	3 7/16 x 4 5/16	7.00	—	151
Limited 49	'41	8-I	3 7/16 x 4 5/16	7.00	—	151
Series 44	'42	8-I	3 3/16 x 4 1/8	6.50	—	142
Series 46	'42	8-I	3 7/16 x 4 5/16	7.00	—	151
Series 50	'46	8-I	3 3/16 x 4 1/8	6.30	—	112
Series 70	'46	8-I	3 7/16 x 4 5/16	6.60	—	114
Series 40	'47	8-I	3 3/16 x 4 1/8	6.30	—	112
Series 50	'47	8-I	3 3/16 x 4 1/8	6.30	—	112
Series 70	'47	8-I	3 7/16 x 4 5/16	6.60	—	114
Series 40, 50, 70	'48	(Not distributed in Canada)				
Series 40, 50, 70	'49	(Not distributed in Canada)				
Series 40, 50, 70	'50	(Not distributed in Canada)				
CADILLAC						
All Series	'41	8-L	3 1/2 x 4 1/2	7.25	—	182
All Series	'42	8-L	3 1/2 x 4 1/2	7.25	—	102
V-8	'46	8-L	3 1/2 x 4 1/2	7.25	—	100
V-8	'47	8-L	3 1/2 x 4 1/2	7.25	—	100–105
V-8	'48	(Not distributed in Canada)				
V-8	'49	(Not distributed in Canada)				
V-8	'50	(Not distributed in Canada)				
CHEVROLET						
Six	'41	6-I	3 1/2 x 3 3/4	6.25	—	112
Six	'42	6-I	3 1/2 x 3 3/4	6.25	—	112
Six	'46	6-I	3 1/2 x 3 3/4	6.50	—	—
Six	'47	6-I	3 1/2 x 3 3/4	6.50	210–220	110
Six	'48	6-I	3 1/2 x 3 3/4	6.50	210–220	110
Six	'49	6-I	3 1/2 x 3 3/4	6.60	210–220	110
Six	'50	6-I	3 1/2 x 3 3/4	6.60	210–220	110
CHRYSLER						
Royal 6 C-28	'41	6-L	3 3/8 x 4 1/2	6.80	—	115
New York C-30	'41	8-L	3 1/4 x 4 7/8	6.80	—	120
Crown Imp. C-33	'41	8-L	3 1/4 x 4 7/8	6.80	—	120
Royal 6 C-34	'42	6-L	3 7/16 x 4 1/2	6.80	—	130
New York C-36	'42	8-L	3 1/4 x 4 7/8	6.80	—	130
Crown Imp. C-37	'42	8-L	3 1/4 x 4 7/8	6.80	—	130
C-38W, C-38S	'46	6-L	3 7/16 x 4 1/2	6.60	—	125–135
Six-C38W, C38S	'47	6-L	3 7/16 x 4 1/2	6.60	150	125–135
Eight-C39, C40	'47	8-L	3 1/4 x 4 7/8	6.70	150	130
Six-C38W, C38S	'48	6-L	3 7/16 x 4 1/2	6.60	150	125–135
Eight-C39, C40	'48	8-L	3 1/4 x 4 7/8	6.70	150	130
6-C45 Roy., Win.	'49	6-L	3 7/16 x 4 1/2	6.60	150	125–135
Eight-C46, C47	'49	8-L	3 1/4 x 4 7/8	7.25	150	125–135
Six C48-1 Roy.	'50	6-L	3 7/16 x 4 1/2	6.60	150	125–135
Six C48-2 Win.	'50	6-L	3 7/16 x 4 1/2	6.60	150	125–135
Eight C49	'50	8-L	3 1/4 x 4 7/8	7.25	150	125–135
Eight C50	'50	8-L	3 1/4 x 4 7/8	7.25	150	125–135
CROSLEY						
CC (to 41547)	'47	4-I	2 1/2 x 2 1/4	7.50	135	110–140
CC, CD (41547-106039)	'48	4-I	2 1/2 x 2 1/4	7.50	135	110–140
CD (After 106039)	'49	4-I	2 1/2 x 2 1/4	7.50	135	110–140
Crosley	'50	4-I	2 1/2 x 2 1/4	8.00	260	125–135
DE SOTO						
Six S-8	'41	6-L	3 3/8 x 4 1/4	6.80	—	115
Six S-10	'42	6-L	3 7/16 x 4 1/4	6.80	—	130
S-11	'46	6-L	3 7/16 x 4 1/4	6.80	—	125–135
S-11	'47	6-L	3 7/16 x 4 1/4	6.80	150	125–135
S-11	'48	6-L	3 7/16 x 4 1/4	6.80	150	125–135
S-13 Custom	'49	6-L	3 7/16 x 4 1/4	6.80	150	125–135
S14 Custom	'50	6-L	3 7/16 x 4 1/4	6.80	150	125–135
DODGE						
Kingsway 6D-20	'41	6-L	3 3/8 x 4 1/16	6.50	—	100
DeLuxe 6 D-21	'41	6-L	3 3/8 x 4 1/16	6.50	—	100
Lux. Liner D-19	'41	6-L	3 3/8 x 4 1/16	6.50	—	100
De Luxe D-23	'42	6-L	3 3/8 x 4 1/16	6.50	—	130
Custom D-22	'42	6-L	3 3/8 x 4 1/4	6.50	—	130
D-25	'46	6-L	3 3/8 x 4 1/16	6.50	—	125–135
D-24	'46	6-L	3 3/8 x 4 1/4	6.80	—	125–135

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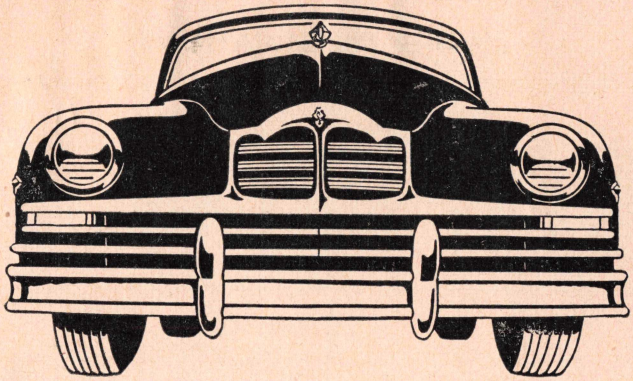
For key to abbreviations see page 13



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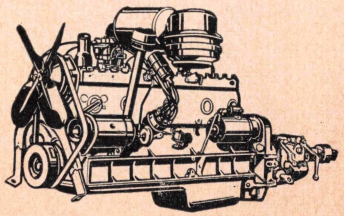

PACKARD MOTOR CAR COMPANY OF CANADA, LIMITED

955 HURON LINE
WINDSOR, ONTARIO

Packard Parts Catalogue available upon request

ENGINE SPECIFICATIONS

Make and Model	Year	No. Cylinders and Valve Arrangement	Bore and Stroke	Compression Ratio—Standard	Cranking Speed (R.P.M.)	Compression Pressure at Cranking Speed (lbs.)
DODGE—(Continued)						
D-25	'47	6-L	3 3/8 x 4 1/16	6.50	125	125-135
D-24	'47	6-L	3 3/8 x 4 1/4	6.80	125	125-135
D-25	'48	6-L	3 3/8 x 4 1/16	6.70	125	125-135
D-24	'48	6-L	3 3/8 x 4 1/4	6.80	125	125-135
D-30	'49	6-L	3 3/8 x 4 1/4	6.80	125	125-135
D-31, D-32	'49	6-L	3 3/8 x 4 1/16	6.70	125	125-135
D34 Custom	'50	6-L	3 3/8 x 4 1/4	6.80	125	125-135
D35, D36 Del. & Sp. Deluxe	'50	6-L	3 3/8 x 4 1/16	6.70	125	125-135
FORD						
V-8 85	'41	8-L	3 1/16 x 3 3/4	6.20	—	100
V-8 85	'42	8-L	3 1/16 x 3 3/4	6.20	—	100
De Luxe	'46	8-L	3 1/16 x 3 3/4	6.40	—	100
Super DeLuxe	'46	8-L	3 1/16 x 3 3/4	6.40	—	100
DeLuxe & Super	'47	8-L	3 5/16 x 3 3/4	6.80	100	110
DeLuxe & Super	'48	8-L	3 5/16 x 3 3/4	6.80	100	110
V-8	'49	8-L	3 5/16 x 3 3/4	6.80	125	110
V-8	'50	8-L	3 5/16 x 3 3/4	6.80	100	110
FRAZER						
F-47	'47	6-L	3 5/16 x 4 3/8	6.86	70	120
F-47&C; 485&6	'48	6-L	3 5/16 x 4 3/8	7.30	70	120-130∅
F-495 & 6	'49	6-L	3 5/16 x 4 3/8	7.30	70	120-130
F-495 & 6	'50	6-L	3 5/16 x 4 3/8	7.30	70	120-130
HILLMAN MINX (English)						
Mark III	'49	4-L	2.48x3.74	6.30	—	112-118
Mark IV	'50	4-S	65x95m	6.60	—	112-118
HUDSON						
Six-10	'41	6-L	3x4 1/8	7.25	—	125
Six-11, 12, 18	'41	6-L	3x5	6.50	—	120
Eight 14, 15, 17	'41	8-L	3x4 1/2	6.50	—	119
"6"-20 Sp.	'42	6-L	3x4 1/8	7.25	—	125
"6"-20P, 21, 22	'42	6-L	3x5	6.50	—	120
"8"-24, 25, 27	'42	8-L	3x4 1/2	6.50	—	119
Six 51, 52	'46	6-L	3x5	6.50	—	120
Eight 53, 54	'46	8-L	3x4 1/2	6.50	—	119
Six 171, 172	'47	6-L	3x5	6.50	125	120
Eight 173, 174	'47	8-L	3x4 1/2	6.50	125	119
Series 481, 482	'48	6-L	3 5/16 x 4 3/8	6.50	150	110
Series 483, 484	'48	8-L	3x4 1/2	6.50	150	119(f)
Series 491, 492	'49	6-L	3 5/16 x 4 3/8	6.50	125	119
Series 493, 494	'49	8-L	3x4 1/2	6.50	125	119
500	'50	6-L	3 9/16 x 3 7/8	6.70	125	100
501 and 502	'50	6-L	3 9/16 x 4 3/8	6.70	125	100
503 and 504	'50	8-L	3x4 3/8	6.70	125	100
HUMBER HAWK (English)						
Sup.SnipeMkII	'48	6-S	3.35x4.72	6.25	—	112-117
Mark III	'49	4-L	2.95x4.33	6.40	—	112-120
Hawk Mk. III	'49	4-S	2.95x4.33	6.40	—	112-120
Sup.SnipeMkII	'49	6-S	3.35x4.72	6.25	—	112-117
Pullman Mk. II	'49	6-S	3.35x4.72	6.25	—	112-117
Hawk Mk. III	'50	4-S	2.95x4.33	6.40	—	112-120
Pullman Mk. II	'50	6-S	3.35x4.72	6.25	—	112-117
Sup.SnipeMkII	'50	6-S	3.35x4.72	6.25	—	112-117
JAGUAR (English)						
1 1/2-Litre.Sal.	46-48	4-I	73x106	6.80	—	—
2 1/2-LitreS&C	46-48	6-I	73x106m	7.30	—	—
3 1/2-LitreS&C	46-48	6-I	82x110m	6.75	—	—
2 1/2 Litre.MkV	'49	6-I	73x106m	7.30	—	—
3 1/2-Litre.MkV	'49	6-I	82x110m	6.75	—	—
3 1/2-Litre.XK120	'49	6-I	83x106m	7.00	—	—
KAISER						
K-100	'47	6-L	3 5/16 x 4 1/8	6.86	70	120
K-100&1; 481&2	'48	6-L	3 5/16 x 4 3/8	7.30	70	120-130∅
K-491&2	'49	6-L	3 5/16 x 4 3/8	7.30	70	120-130
K-49 1 & 2	'50	6-L	3 5/16 x 4 3/8	7.30	70	120-13
LINCOLN						
Continental	'41	12-L	2 7/8 x 3 3/4	7.00	—	110
Linc. & Cont.	'47	12-L	2 7/8 x 3 3/4	7.30	100	125
Linc. & Cont.	'48	12-L	2 7/8 x 3 3/4	7.30	100	125
Linc. & Cont.	'49	(Not distributed in Canada)				
Linc. & Cont.	'50	(Not distributed in Canada)				
MERCURY						
Mercury	'41	8-L	3 5/16 x 3 3/4	6.30	—	100
Mercury	'42	8-L	3 5/16 x 3 3/4	6.40	—	100
114 & 114X	'46	8-L	3 1/16 x 3 3/4	6.80	—	110
118	'46	8-L	3 5/16 x 3 3/4	7.20	—	115

(*Continued on page 9*)

For key to abbreviations see page 13

ENGINE SPECIFICATIONS

Make and Model	Year	No. Cylinders and Valve Arrangement	Bore and Stroke	Compression Ratio—Standard	Cranking Speed (R.P.M.)	Compression Pressure at Cranking Speed (lbs.)
MERCURY—(Continued)						
114, 114X & 118	'47	8-L	3 5/16x3 3/4	7.20	100	115
114, 114X & 118	'48	8-L	3 5/16x3 3/4	7.20	100	115
Mercury	'49	8-L	3 5/16x4	7.20	125	115
Mercury	'50	8-L	3 5/16x4	6.80	100	115
METEOR						
Meteor	'49	8-L	3 5/16x3 3/4	6.80	125	110
Meteor	'50	8-L	3 5/16x3 3/4	6.80	100	110
MG (English)						
T.C.	'48	4-I	66.5x90m	7.40	—	145–150
Series "Y"	'49	4-I	66.5x90m	7.40	—	145–150
Series TD	'50	4-I	66.5x90m	7.25	—	165
Series "Y"	'50	4-I	66.5x90m	7.3-7.5	—	165
MONARCH						
V-8	'46	8-L	3 5/16x3 3/4	6.80	—	110
V-8	'47	8-L	3 5/16x3 3/4	6.80	100	110
V-8	'48	8-L	3 5/16x3 3/4	6.80	100	110
V-8	'49	8-L	3 5/16x4	7.20	125	115
V-8	'50	8-L	3 5/16x4	6.80	100	115
MORRIS (English)						
8 Series E	'48	4-L	2.244x3.54	6.50	—	140
10 Series M	'48	4-I	2.5x3.54	6.00	—	140
Minor	'48	4-S	2.24x3.54	6.5-6.7	—	105–110
Oxford	'48	4-S	2.89x3.42	6.8-7	—	105–110
Minor	'49	4-S	2.24x3.54	6.5-6.7	—	105–110
"Six"	'49	6-I	2.89x3.42	7.00	—	110–115
Oxford	'49	4-S	2.89x3.42	6.8-7	—	105–110
Oxford	'50	4-S	2.89x3.42	6.8-7	—	105–110

(*Continued on page 11*)

For key to abbreviations see page 13

ENGINE SPECIFICATIONS

Make and Mode	Year	No. Cylinders and Valve Arrangement	Bore and Stroke	Compression Ratio—Standard	Cranking Speed (R.P.M.)	Compression Pressure at Cranking Speed (lbs.)
MORRIS—(Continued)						
Minor	'50	4-S	2.24x3.54	6.5-6.7	—	105–110
"Six"	'50	6-I	2.89x3.42	7.00	—	110–115
NASH						
Ambassador 600	'41	6-L	3 1/8x3 3/4	6.87	—	120
Ambassador 6	'41	6-I	3 3/8x4 3/8	6.30	—	125
Ambassador 8	'41	8-I	3 1/8x4 1/4	6.50	—	110
4240—"6"	'42	6-L	3 1/8x3 3/4	6.87	—	120
4260—"6"	'42	6-I	3 3/8x4 3/8	6.50	—	125
4280—"8"	'42	8-I	3 3/8x4 1/4	6.60	—	110
Series 4640	'46	6-L	3 1/8x3 3/4	7.10	—	120
Series 4660	'46	6-L	3 3/8x4 3/8	7.00	—	125
Series 4740	'47	6-L	3 1/8x3 3/4	7.10	350	120
Series 4760	'47	6-L	3 3/8x4 3/8	7.02	350	125
Series 4840	'48	6-L	3 1/8x3 3/4	7.00	350	120
Series 4860	'48	6-I	3 3/8x4 3/8	7.10	350	125
Series 4940	'49	6-L	3 1/8x3 3/4	7.00	350	120
Series 4960	'49	6-I	3 3/8x4 3/8	7.02	350	125
Can. Statesman	'50	6-L	3 1/8x4	7.00	450–500	120
Statesman(U.S.)	'50	6-L	3 1/8x4	7.00	450–500	120
Amb'ador(U.S.)	'50	6-I	3 1/8x4 3/8	7.30	450–500	130
Rambler (U.S.)	'50	6-L	3 1/8x3 3/4	7.25	450–500	120
OLDSMOBILE						
Six	'41	6-L	3 1/2x4 1/8	6.10	—	115
Eight	'41	8-L	3 1/4x3 7/8	6.30	—	105
Six	'42	6-L	3 1/2x4 1/8	6.50	—	102
Eight	'42	8-L	3 1/4x3 7/8	6.50	—	105
Six	'46	6-L	3 1/2x4 1/8	6.50	—	115
Eight	'46	8-L	3 1/4x3 7/8	6.50	—	107
Six	'47	6-L	3 1/2x4 1/8	6.50	100	102*
Eight	'47	8-L	3 1/4x3 7/8	6.50	100	105*
Six	'48	6-L	3 1/2x4 1/8	6.50	100	102*
Eight	'48	8-L	3 1/4x3 7/8	6.50	100	105*
Six	'49	6-L	3 17/32x4 3/8	6.50	100	125
Eight	'49	8-I	3 3/4x3 7/16	7.25	100	136
Six (76)	'50	6-L	3 17/16x4 3/8	6.50	—	160f
Eight (88)	'50	8-I	3 3/4x3 7/16	7.25	150	136
PACKARD						
110	'41	6-L	3 1/2x4 1/4	6.39	—	—
120	'41	8-L	3 1/4x4 1/4	6.41	—	—
Super 8	'41	8-L	3 1/2x4 5/8	6.45	—	—
"6"—2000	'42	6-L	3 1/2x4 1/4	6.71	—	—
"8"—2001	'42	8-L	3 1/4x4 1/4	6.85	—	—
Super 8-2003, 6	'42	8-L	3 1/2x4 5/8	6.85	—	—
2100	'46	6-L	3 1/2x4 1/4	6.71	—	—
2101 & 2111	'46	8-L	3 1/4x4 1/4	6.85	—	—
2103 & 2126	'46	8-L	3 1/2x4 5/8	6.85	—	—
2100 & 2130†	'47	6-L	3 1/2x4 1/4	6.71	—	—
2101 & 2111	'47	8-L	3 1/4x4 1/4	6.85	—	—
2103,2106&2126	'47	8-L	3 1/2x4 5/8	6.85	—	—
2201 & 2211	'48	8-L	3 1/2x3 3/4	7.00	—	—
2202 & 2232	'48	8-L	3 1/2x4 1/4	7.00	—	—
2206 & 2233	'48	8-L	3 1/2x4 5/8	7.00	—	—
2301	'49	8-L	3 1/2x3 3/4	7.00	—	—
2302, 2332	'49	8-L	3 1/2x4 1/4	7.00	—	—
2306, 2333	'49	8-L	3 1/2x4 5/8	7.00	—	—
2301	'50	8-L	3 1/2x3 3/4	7.00	—	—
2302, 2332	'50	8-L	3 1/2x4 1/4	7.00	—	—
2306, 2333	'50	8-L	3 1/2x4 5/8	7.00	—	—
PLYMOUTH						
Roadking 6 P-11	'41	6-L	3 3/8x4 1/16	6.50	—	100
De Luxe 6 P-12	'41	6-L	3 3/8x4 1/16	6.50	—	100
De Luxe P-14	'42	6-L	3 3/8x4 1/16	6.50	—	130
P-15	'46	6-L	3 3/8x4 1/16	6.50	—	125–135
P-15	'47	6-L	3 3/8x4 1/16	6.50	125	125–135
P-15	'48	6-L	3 3/8x4 1/16	6.70	125	125–135
P17, P18	'49	6-L	3 3/8x4 1/16	6.70	125	125–135
P-19 Deluxe	'50	6-L	3 3/8x4 1/16	6.70	125	125–135
P-20 Del.&Sp.	'50	6-L	3 3/8x4 1/16	6.70	125	125–135
PONTIAC						
Sixes	'41	6-L	3 9/16x4	6.50	—	155f
Sixes	'42	6-L	3 9/16x4	6.50	—	155f
Six	'46	6-L	3 9/16x4	6.50	—	160
Eight	'46	8-L	3 1/4x3 3/4	6.50	—	158
Six	'47	6-L	3 9/16x4	6.50	220	105–110
Eight	'47	8-L	3 1/4x3 3/4	6.50	220	105–110
Six	'48	6-L	3 9/16x4	6.50	220	105–110
Eight	'48	8-L	3 1/4x3 3/4	6.50	220	105–110
6-2000,2200,2500	'49	6-L	3 9/16x4	6.50	—	191f
Eight	'49	8-L	3 1/4x3 3/4	6.50	—	189f
6-2000 2200 2500	'50	6-L	3 9/16x4	6.50	1000	160
Eight-2700	'50	8-L	3 3/8x3 3/4	6.50	1000	156

N.B.
Fleetleaders (1941-2-6-7-8) are 20 and 22 Series
Torpedo 6 & 8 (1941-2-6-7-8) are 25 and 27 Series respectively.
Streamliner 6 & 8 (1941-2-6-7-8) are 26 and 28 Series respectively.
Streamliner 6 & 8 (1948) not distributed in Canada.

For key to abbreviations see page 13

ENGINE SPECIFICATIONS

Make and Model	Year	No. Cylinders and Valve Arrangement	Bore and Stroke	Compression Ratio—Standard	Cranking Speed (R.P.M.)	Compression Pressure at Cranking Speed (lbs.)
PREFECT (English)						
Four Cylinder	'49	4-L	2.5x3.64	6.16	80	104°
Four Cylinder	'50	4-L	2.50x3.64	6.16	80	104°
RILEY (English)						
100hp. 2½-Litre	'49	4-I	80½x120m	—	—	—
1½-Litre	'50	4-I	2.71x3.93	6.7	180	115
2½-Litre	'50	4-I	3.16x4.72	6.8	150	125
ROVER (English)						
75	'49	6-R	2.567x4.13	7.25h	—	—
75	'50	6-F	2.56x4.13	7.25	300	140
Land Rover	'50	4-F	2.73x4.13	6.8	300	140
STUDEBAKER						
Champ. 6-3G	'41	6-L	3x4	6.50	—	105
Comm. 6-11A	'41	6-L	3 5/16x4 3/8	6.50	—	105
President 8-7C	'41	8-L	3 1/16x4 1/4	6.50	—	105
Champ. 6-4G	'42	6-L	3x4	6.50	—	105
Comm. 6-12A	'42	6-L	3 5/16x4 3/8	6.50	—	105
President 8-8C	'42	8-L	3 1/16x4 1/4	6.50	—	105
Skyway	'46	6-L	3x4	6.50	—	105
Champ. 6-G	'47	6-L	3x4	6.50	—	105
Comm. 14A	'47	6-L	3 5/16x4 3/8	6.50	—	105
Champ. 7-G	'48	6-L	3x4	6.50	150	105
Comm. 15A	'48	6-L	3 5/16x4 3/8	6.50	150	105
Champ. 8-G	'49	6-L	3x4	6.50	150	105
Comm. 16A	'49	6-L	3 5/16x4 3/4	6.50	150	105
Champion 9G	'50	6-L	3x4	7.00	150	120
Comm. 17A	'50	6-L	3 5/16x4 3/4	7.00	150	120
SUNBEAM TALBOT (English)						
90	'49	4-I	2.95x4.33	6.59	—	130
90	'50	4-I	2.95x4.33	6.59	—	121–125
TRIUMPH (English)						
TRD (1800)	'47-48	4-I	73x106m	6.7	—	—
TRA	'49	4-I	85x92m	6.7	—	—
VANGUARD (English)						
Sedan & Est. car	'49	4-I	3.347x3.622	6.70	200	120
Sed. & Est. car	'50	4-I	3.34x3.62	6.70	200	120
VAUXHALL LIP (English)						
Velox	'49	6-I	2.736x3.946	7.50-100-200H		110-120V
Velox	'50	6-I	2.73x3.94	7.50	200	110–120
WILLYS						
Willys Americar	'41	4-L	3 1/8x4 3/4	6.48	—	111
Willys Americar	'42	4-L	3 1/8x4 3/4	6.48	—	111
CJ-2A Uni. Jeep	'45	4-L	3 1/8x4 3/4	6.48	—	111
CJ-2A Uni. Jeep	'47	4-L	3 1/8x4 3/4	6.48	185	111
CJ-2A, 2&4WD.	'48	4-L	3 1/8x4 3/8	6.48	185	115
4 63	'48	4-L	3 1/8x4 3/8	6.48	150	115
6 63	'48	6-L	3x3 1/2	6.42	150	117
CJ-2A, 2&4WD.	'49	4-L	3 1/8x4 3/8	6.48	185c	115
4 63	'49	4-L	3 1/8x4 3/8	6.48	150	115
6 63	'49	6-L	3x3 1/2	6.42	150	117
CJ-3A	'49	4-L	3 1/8x4 3/8	6.48	150	115
4-73 Sta. Wgn.	'50	4-F	3 1/8x4 3/8	7.40	185	135
4x4.63 Sta. Wgn.	'50	4-L	3 1/8x4 3/8	6.48	—	—
6-73 Sta. Wgn.	'50	6-L	3 1/8x3 1/2	6.90	185	145
4-73VJ Jeepster	'50	4-F	3 1/8x4 3/8	7.40	185	135
6-73VJ Jeepster	'50	6-L	3 1/8x3 1/2	6.90	185	145
WOLSELEY (English)						
Four-Fifty	'49	4-I	2.894x3.425	7.00	—	—
Six-Eighty	'49	6-I	2.894x3.425	7.00	—	—
Six-Eighty	48-50	6-I	2.89x3.42	7.00	—	110–115
Four-Fifty	48-50	4-I	2.89x3.42	7.00	—	110–115

ABBREVIATIONS

c—185 r.p.m. cranking speed applies only to CJ-2A for 1948 and up to March 1949 when model superseded by CJ-3A. Cranking speed 150 r.p.m. for 2WD and 4WD.
f—At 1000 rpm.
(f)—At 125 r.p.m.
F—Overhead inlet valves and side exhaust.
h—High Compression 7.50
H—Hot
I—Valve in head
L—L-type block
m—Millimeters
R—Overhead inlet, side exhaust.
S—Side valve.
V—At. 200 r.p.m.
•—Plus or minus 10. (At. 100 rpm.)
†—Series 2130 taxi cab, six cylinder (Packard)
Ø—Throttle open.
°—Plus or minus 10.

What is

ENGINE TUNE-UP?

ENGINE TUNE-UP means performing the operations necessary to restore new car performance and economy. This is accomplished by returning all working parts to the original standards of adjustment according to the manufacturer's specifications. It may be necessary to install new parts in order to ensure that accurate adjustment will be maintained for a reasonable number of miles.

Tune-up Data: In order to return adjustments to standard, the tune-up technician must know what the standards are. For this reason, Motor Magazine's Canadian Service Data Book includes a Tune-up Section with the necessary data compiled for quick reference. Additional specifications may be located easily by referring to the sections of the book listed under "CONTENTS" on the front cover, or to the cross index on pages 160-161.

Why Tune-up is necessary: Normal wear, which is the natural result of continuous use, will gradually alter critical adjustments and cause a decline in car performance. When a customer complains of poor gasoline mileage, missing, hard starting, sluggish engine—sell him a complete tune-up.

Tune-up Procedure: First: Check the battery, cables and connections. If the battery is partially discharged, replace it before proceeding with further tests. Next, run the engine until it is at normal operating temperature, then check for mechanical troubles using a vacuum and compression gauge. Follow the tune-up cycle: 1.—Compression. 2.—Ignition. 3.—Carburetion. 4.—Safety Items. Satisfactory results cannot be obtained without completing the entire cycle as a definite, orderly service operation.

ENGINE TUNE-UP

Make and Model	Year	Set Breaker Gap (Minimum-Maximum)	Breaker Spring Tension (Ounces) (Min.-Max.)	Timing—Deg. B. or A. TDC	Battery—Terminal Grounded	Valve Clearance—Intake (Minimum-Maximum)	Valve Clearance—Exhaust (Minimum-Maximum)	Compression Pressure at Cranking Speed (lbs.)	Spark Plug—Thread Size (mm)	Spark Plug Make—Original Equipment	Spark Plug Model No.	Spark Plug Gap (Minimum-Maximum)	Float Level or Fuel Level
ANGLIA (English)													
Four Cylinder	'49	.010-.012	18-22	5B	P	.0115-.0135	.015-.017	104(p)	14	Cha	L-10	.020-.022	.66a
Four Cylinder	'50	.010-.012	18-22	5B	P	.011-.013	.015-.017	104	14	Cha	L-10	.020-.022	.669
AUSTIN (English)													
A.40	'48	.010-.012	17-20	5°B	P	.015	.015	—	14	Cha	NA8D	.017-.018	PP
A-40 Devon & Dorset	'49	.010-.012	17-20	TDC	P	.015	.015	120-125	14	Cha	N8	.018	PP
A-40 Dev.,& Dor.	'50	.010-.012	20-24	TDC	P	.015H	.015H	120-125	14	Cha	N8	.018-.022	—
BUICK													
40 Special	'41	.015	—	4B	N	.015H	.015H	142	10	AC	104	.025	19/32
45 Super	'41	.015	—	4B	N	.015H	.015H	148	10	AC	104	.025	19/32
46 Century	'41	.015	—	6B	N	.015H	.015H	151	10	AC	104	.025	19/32
47 & 49	'41	.015	—	6B	N	.015H	.015H	151	10	AC	104	.025	19/32
Series 44	'42	.015	—	4B	N	.015H	.015H	142	14	AC	46	.025	19/32
Series 46	'42	.015	—	6B	N	.015H	.015H	151	14	AC	46	.025	19/32
Series 50	'46	.015	—	4B	N	.015H	.015H	112	14	AC	48	.025	—
Series 70	'46	.015	—	6B	N	.015H	.015H	114	14	AC	48	.025	—
Series 40	'47	.015-.017	19-23	4B	N	.015H	.015H	112	14	AC	48	.025	†
Series 50	'47	.015-.017	19-23	4B	N	.015H	.015H	112	14	AC	48	.025	†
Series 70	'47	.015-.017	19-23	6B	N	.015H	.015H	114	14	AC	48	.025	†
Series 40, 50, 70	'48	(Not distributed in Canada)											
Series 40, 50, 70	'49	(Not distributed in Canada)											
Series 40, 50 70	'50	(Not distributed in Canada)											
CADILLAC													
All Series	'41	.0125	—	5B	P	Automatic Take-up		182	10	AC	104	.025	5/8
Al Series	'42	.0125	—	5B	P	Automatic Take-up		182	10	AC	104	.025	5/8
V-8	'46	.015	—	5B	P	Automatic Take-up		100	10	AC	104	.030	—
V-8	'47	.0125-.0175	19-23	5B	P	Automatic Take-up		100-105	10	AC	104	.025-.030	††
V-8	'48	(Not distributed in Canada)											
V-8	'49	(Not distributed in Canada)											
V-8	'50	(Not distributed in Canada)											
CHEVROLET													
Six	'41	.018	—	5B	N	.006H	.013H	112	14	AC	44	.040	1/2
Six	'42	.018	—	5B	N	.006H	.013H	112	14	AC	44	.040	1/2
Six	'46	.018	—	5B	N	.006H	.013H	—	10	AC	M8	.040	—
Six	'46	.018	—	5B	N	.006-.008H	.013-.015H	—	10	AC	M8	.040	—
Six	'47	.018	17-21	5B	N	.006-.008x	.013-.015x	110	10	AC	M8	.040	1/2
Six	'48	.018	17-21	5B	N	.006-.008x	.013-.015x	110	10	AC	M8	.040	1/2
Six	'49	.018-.024	17-21	5B	N	.006H	.013H	110	14	AC	46-5	.035	1/2
Six	'50	.018-.024	17-21	5B	N	.001-.0027	.002-.0037	110	14	AC	46-5	.035	—
CHRYSLER													
Ry. 16 C28	'41	.020	—	TDC	P	.008H	.010H	115	14	AL	A-7	.025	5/64
Ny. 8 C30	'41	.017	—	TDC	P	.008H	.010H	120	14	AL	A-7	.025	5/8
Crn. 8 C33	'41	.017	—	z	P	.008H	.010H	120	14	AL	A-7	.025	5/8

(Continued on page 19)

For key to abbreviations see page 27

ENGINE TUNE-UP

Make and Model	Year	Set Breaker Gap (Minimum-Maximum)	Breaker Spring Tension (Ounces) (Min.-Max.)	Timing—Deg. B. or A. TDC	Battery—Terminal Grounded	Valve Clearance—Intake (Minimum-Maximum)	Valve Clearance—Exhaust (Minimum-Maximum)	Compression Pressure at Cranking Speed (lbs.)	Spark Plug—Thread Size (mm)	Spark Plug Make—Original Equipment	Spark Plug Model No.	Spark Plug Gap (Minimum-Maximum)	Float Level or Fuel Level
CHRYSLER—(Continued)													
Ry. 6 C34	'42	.020	—	2A	P	.008H	.010H	130	14	AL	I-7	.025	5/64
NY. 8 C36	'42	.018	—	5A	P	.008H	.010H	130	14	AL	I-7	.025	5/64
Crn. 8 C37	'42	.018	—	5A	P	.008H	.010H	130	14	AL	A-7	.025	5/64
Six C38W, C38S	'46	.020	—	2A	P	008H	.010H	125-135	14	AL	A-5	.025	5/64
Eight C39, C40	'46	.018	—	2A	P	.008H	.010H	130	14	AL	A-5	.025	5/64
Six C38W, C38S	'47	.020	17-20	2A	P	.008H	.010H	125-135	14	AL	A-5	.025	5/64
Eight C39, C40	'47	.018	18-20	2A	P	.008H	.010H	130	14	AL	A-5	.025	5/64
Six C38W, C38S	'48	.020	17-20	2A	P	.008H	.010H	125-135	14	AL	A-5	.025	5/64
Eight C39, C40	'48	.018	18-20	2A	P	.008H	.010H	130	14	AL	A-5	.025	5/64
Six—C45	'49	.020	17-20	2A	P	.008H	.010H	125-135	14	AL	AR5	.038(b)	5/64
Eight—C46, C47	'49	.018	18-20	2A	P	.008H	.010H	125-135	14	AL	AR5	.038(b)	5/64
Six C48-1, C48-2	'50	.020	17-20	2A	P	.008H	.010H	125-135	14	AL	AR5	.025(c)	5/64
Eight C49-C50	'50	.018	18-20	2A	P	.008H	.010H	125-135	14	AL	AR5	.035(c)	5/64
CROSLEY													
CC (Up to 41547)	'47	.020-.024	17-20	12B*	P	.005-.006	.006-.007	110-140	14	AL	AN-7E	.025	5/16C
CC, CD (to 106039)	'48	.020-.024	17-20	12B*	P	.005-.006	.006-.007	110-140	14	AL	AN-7E	.025	5/16C
CD (After 106039)	'49	.020-.024	17-20	12B*	P	.005-.006	.006-.007	110-140	14	AL	AN-7E	.025	5/16C
Crosley	'50	.020	17-20	12B	P	.004-.006C	.007-.009C	125-135	14	AL	AN-7E	.025	127/64X
DE SOTO													
Six S-8	'41	.020	—	TDC	P	.008H	.010H	115	14	AL	A-7	.025	5/64
Six S-10	'42	.020	—	TDC	P	.008H	.010H	130	14	AL	A-7	.025	5/64
Six S-11	'46	.020	—	TDC	P	.008H	.010H	125-135	14	AL	A-5	.025	5/64
S-11	'47	.020-.024	17-20	TDC	P	.008H	.010H	125-135	14	AL	A-5	.025	5/64
S-11	'48	.020-.024	17-20	TDC	P	.008H	.010H	125-135	14	AL	A-5	.025	5/64
S-13 Custom	'49	.020	17-20	TDC	P	.008H	.010H	125-135	14	AL	AR5	.038(b)	5/64
S14	'50	.020	17-20	TDC	P	.008H	.010H	125-135	14	AL	AR5	.035(c)	5/64
DODGE													
K'y 6 D-20	'41	.020	—	TDC	P	.008H	.010H	100	14	AL	A-7	.025	5/8
DeL. D-21	'41	.020	—	TDC	P	.008H	.010H	100	14	AL	A-7	.025	5/8
Lux. D-19	'41	.020	—	TDC	P	.008H	.010H	100	14	AL	A-7	.025	5/8
DeL. D-23	'42	.020	—	TDC	P	.008H	.010H	130	14	AL	A-7	.025	5/8
Cus. D-22	'42	.020	—	TDC	P	.008H	.010H	130	14	AL	A-7	.025	5/8
D-24	'46	.020	—	TDC	P	.008H	.010H	125-135	14	AL	A-5	.025	5/8
D-25	'46	.020	—	TDC	P	.008H	.010H	125-135	14	AL	A-5	.025	5/8
D-25	'47	.020-.024	17-20	TDC	P	.008H	.010H	125-135	14	AL	A-5	.025	5/8
D-24	'47	.020-.024	17-20	TDC	P	.008H	.010H	125-135	14	AL	A-5	.025	5/8
D-25	'48	.020-.024	17-20	TDC	P	.008H	.010H	125-135	14	AL	A-5	.025	5/8
D-24	'48	.020-.024	17-20	TDC	P	.008H	.010H	125-135	14	AL	A-5	.025	5/8
D30	'49	.020	17-20	TDC	P	.008H	.010H	125-135	14	AL	AR5	.038(b)	5/8
D31, D32	'49	.020	17-20	TDC	P	.008H	.010H	125-135	14	AL	AR5	.038(b)	5/64
D34-D35-D36	'50	.020	17-20	TDC	P	.008H	.010H	125-135	14	AL	AR5	.035(c)	5/8(C)
FORD													
V-8, 85	'40	.015	—	4B	P	.012	.012	100	14	Cha	H-10	.025	11/16
V-8, 85	'41	.015	—	4B	P	.012	.012	100	14	Cha	H-10	.025	15/32
V-8, 85	'42	.015	—	4B	P	.012	.012	100	14	Cha	H-10	.025	15/32
De Luxe	'46	.014	—	4B	P	.011C	.011C	100	14	Cha	H-10	.025	11/16

For key to abbreviations see page 27

(Continued on page 21)

ENGINE TUNE-UP

Make and Model	Year	Set Breaker Gap (Minimum-Maximum)	Breaker Spring Tension (Ounces) (Min.-Max.)	Timing—Deg. B. or A. TDC	Battery—Terminal Grounded	Valve Clearance—Intake (Minimum-Maximum)	Valve Clearance—Exhaust (Minimum-Maximum)	Compression Pressure at Cranking Speed (lbs.)	Spark Plug—Thread Size (mm)	Spark Plug Make—Original Equipment	Spark Plug Model No.	Spark Plug Gap (Minimum-Maximum)	Float Level or Fuel Level
FORD—(Continued)													
Super De Luxe	'46	.014	—	4B	P	.011C	.011C	100	14	Cha	H-10	.025	11/16
DeL. & Super DeL...	'47	.014-.016	20-24	4B	P	.010-.012C	.014-.016C	110	14	Cha	H-10	.025	11/16
DeL. & Super DeL...	'48	.014-.016	20-24	4B	P	.010-.012C	.014-.016C	110	14	Cha	H-10	.025	11/16 5
V-8	'49	.014-.016	17-20	2B	P	.010-.012	.014-.016	110	14	Cha	H-10	.025-.028	11/16
V-8	'50	.014-.016	17-20	2B	P	.013-.015	.017-.019	90-110	14	Cha AC	H-10	.028-.032	1.3
FRAZER													
F-47	'47	.020-.024	17-20	TDC	P	.014	.014	120	14	AL or Cha	J-9-64	.032	5/16(f)
F-47-47C-485-486	'48	.020	17-20	TDC(x)	P	.010C#	.014C	120-130E	14	AL	A-5	.032	FL
Series F-495, 496	'49	.022	17-20	4B	P	.014	.014	120-130	14	AL	AL-A5	.032	1/16
Series F-495-496	'50	.022	17-20	4B	P	.014	.014	120-130	14	AL	AL-A5	.032	1/16
HILLMAN MINX (English)													
Mark III	'49	.010-.012	—	7B	P	.010	.015	112-118	14	Cha	L-10	.028-.032	—
Mark IV	'50	.010-.012	20-24	10B	P	.010	.015	112-118	14	Cha	L-10	.028-.032	—
HUDSON													
Six-10	'41	.020	—	1/2B	P	.010H	.012H	125	14	Cha	J-9	.032	1/8
Six-11, 12	'41	.020	—	1/2B	P	.006H	.008H	120	14	Cha	J-9	.032	1/8
Six-18	'41	.020	—	1/2B	P	.006H	.008H	120	14	Cha	J-9	.032	1/8
Eight	'41	.017	—	TDC	P	.006H	.008H	119	14	Cha	J-9	.032	1/8
6-20C, 20 SP, 28	'42	.020	—	1/2B	P	.010H	.012H	125	14	Cha	J-9	.032	1/8
6-21, 22	'42	.020	—	1/2B	P	.006H	.008H	120	14	Cha	J-9	.032	1/8
Eights	'42	.017	—	TDC	P	.006H	.008H	119	14	Cha	J-9	.032	1/8
Six 51, 52	'46	.020	—	1/2B	P	.010H	.012H	120	14	Cha	J-9	.032	1/8
Eight 53, 54	'46	.017	—	TDC	P	.010H	.010H	119	14	Cha	J-9	.032	1/8
Six 171, 172	'47	.020	18m	1/2B	P	.010H	.012H	120	14	Cha	J-9	.032	1/8
Eight 173, 174	'47	.017	18m	TDC	P	.006H	.008H	119	14	Cha	J-9	.032	1/8
Series 481, 482	'48	.020	17-20	TDC	P	.010	.012	110	14	Cha	J-7(h)	.032-.045	5/16
Series 483, 484	'48	.017	17-20	TDC	P	.006	.008	119F	14	Cha	J-7(h)	.032-.045	13/64
Series 491, 492	'49	.020	17-20	TDC	P	.008H	.010H	119	14	Cha	J-9(h)	.032-.045	5/16
Series 493, 494	'49	.017	17-20	TDC	P	.006H	.008H	119	14	Cha	J-9(h)	.032-.045	13/64
Series 500, 501, 502	'50	.020	17-20	TDC	P	.008H	.010H	100	14	Cha	H-8	.032	5/16
Series 503 and 504	'50	.017	17-20	TDC	P	.006H	.008H	100	14	Cha	H-8	.032	13/64
HUMBER HAWK (English)													
Super Snipe Mk. II	'48	.010-.012	20-24	6B	P	.010	.010	112-120	14	Cha	L-10	.028-.032	(H)
Hawk Mk. III	'49	.010-.012	20-24	6B	P	.010	.010	112-120	14	Cha	L-10	.028-.032	(H)
Mark III	'49	.010-.012	20-24	4B	P	.010	.010	112-120	14	Cha	L-10	.028-.032	(H)
Pullman Mk. II	'49	.010-.012	20-24	6B	P	.010	.010	112-117	14	Cha	L-10	.028-.032	(H)
Super Snipe Mk. II	'49	.010-.012	20-24	6B	P	.010	.010	112-120	14	Cha	L-10	.028-.032	(H)
Hawk Mk. III	'50	.010-.012	20-24	6B	P	.010	.010	112-120	14	Cha	L-10	.028-.032	(H)
Pullman Mk. II	'50	.010-.012	20-24	6B	P	.010	.010	112-117	14	Cha	L-10	.028-.032	(H)
Super Snipe Mk. II	'50	.010-.012	20-24	6B	P	.010	.010	112-120	14	Cha	L-10	.028-.032	(H)
JAGUAR (English)													
1½ Litre, Sal.	'46-'48	.010-.012	20-24	5B	P	.015C	.018C	—	14	Cha	(2)	.022-.025	7/16
2½ Litre S & C	'46-'48	.010-.012	20-24	10B	P	.012C	.015C	—	14	Cha	(1)	.022-.025	7/16

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ENGINE TUNE-UP

Make and Model	Year	Set Breaker Gap (Minimum-Maximum	Breaker Spring Tension (Ounces) (Min.-Max.)	Timing—Deg. B. or A. TDC	Battery—Termina l Grounded	Valve Clearance—Intake (Minimum-Maximum)	Valve Clearance—Exhaust (Minimum-Maximum)	Compression Pressure at Cranking Speed (lbs.)	Spark Plug—Thread Size (mm)	Spark Plug Make—Original Equipment	Spark Plug Model No.	Spark Plug Gap (Minimum-Maximum)	Float Level or Fuel Level
JAGUAR—(Continued)													
3½ Litre S & C	'46-'48	.010-.012	20-24	10B	P	.012C	.015C	—	14	Cha	(2)	.022-.025	7/16
2½ Ltre. S&C Mk.V	'49	.010-.012	20-24	5B	P	.012C	.015C	—	14	Cha	N8	.022-.025	7/16
3½ Ltre. S&C Mk.V	'49	.010-.012	20-24	5B	P	.012C	.015C	—	14	Cha	L-10	.022-.025	7/16
3½ Litre. XK. 120	'49	.010-.012	20-24	5B	P	.006C	.008C	—	14	Cha	NA8	.022-.025	7/16
KAISER													
Series K-100	'47	.020-.024	17-20	TDC	P	.014	.014	120	14	AL or Cha	J-9-64	.032	5/16(f)
K-100-101-481-482	'48	.020	17-20	TDC(x)	P	.010C #	.014C	120-130E	14	AL	A-5	.032	FL
Series K-491, 492	'49	.022	17-20	4B	P	.014	.014	120-130	14	AL	AL-A5	.032	¾K
Series K-491, 492	'50	.022	17-20	4B	P	.014	.014	120-130	14	AL	AL-A5	.032	½K
LINCOLN													
Lincoln Continental	'41	.014	—	4B	P	Automatic Take-up		110	14	Cha	H-10	.028	—
Linc. & Cont.	'47	.014-.016	20-24	4B	P	Automatic Take-up		125	14	Cha	H-10	.028	19/32
Linc. & Cont.	'48	.014-.016	20-24	4B	P	Automatic Take-up		125	14	Cha	H-10	.028	19/32
Linc. & Cont.	'49	(Not distributed in Canada)											
Linc. & Linc. Cont.	'50	(Not distributed in Canada)											
MERCURY													
Mercury	'41	.015	—	4B	P	.012	.012	100	14	Cha	H-10	.025	15/32
Mercury	'42	.015	—	4B	P	.012	.012	100	14	Cha	H-10	.025	15/32
114 & 114X	'46	.014	—	4B	P	.011C	.015C	110	14	Cha	H-10	.025	11/16
118	'46	.014	—	4B	P	.011C	.015C	115	14	Cha	H-10	.025	11/16
114, 114X & 118	'47	.014-.016	20-24	4B	P	.010-.012C	.014-.016C	115	14	Cha	H-10	025	11/16
114, 114X & 118	'48	.014-.016	20-24	4B	P	.010-.012C	.014-.016C	115	14	Cha	H-10	.025	11/16
Mercury	'49	.014-.016	17-20	2B	P	.010-.012	.014-.016	115	14	Cha	H-10	.025-.028	¾(F)
Mercury	'50	.014-.016	17-20	2B	P	.010-.012	.014-.015	90-115	14	Cha or AC	H-10	.028-.032	pm
METEOR													
Meteor	'49	.014-.016	17-20	2B	P	.010-.012	.014-.016	110	14	Cha	H-10	.025-.028	11/16
Meteor	'50	.014-.016	17-20	2B	P	.013-.015	.017-.019	90-110	14	Cha or AC	H-10	.028-.032	1.35
MG (English)													
T.C.	'48	.010-.012	—	TDC	P	.019H	.019H	145-150	14	Cha	L-10S	.018-.022	7/16
Series Y	'49	.010-.012	—	TDC	P	.019H	.019H	145-150	14	Cha	L-10S	.018-.022	7/16
Series TD	'50	.010-.012	20-24	TDC	P	.019H	.019H	165	14	T	T	.020-.022	⅛(B)
Series Y	'50	.010-.012	20-24	TDC	P	.019H	.019H	165	14	Cha	L-10S	.020-.022	⅛(B)
MONARCH													
V-8	'46	.014	—	4B	P	.011C	.015C	110	14	Cha	H-10	.025	11/16
V-8	'47	.014-.016	20-24	4B	P	.010-.012C	.014-.016C	110	14	Cha	H-10	.025	11/16
V-8	'48	.014-.016	20-24	4B	P	.010-.012C	.014-.016C	110	14	Cha	H-10	.025	11/16
V-8	'49	.014-.016	17-20	2B	P	.010-.012	.014-.016	115	14	Cha	H-10	.025-.028	¾(F)
V-8	'50	.014-.016	17-20	2B	P	.010-.012	.014-.016	90-115	14	Cha or AC	H-10	.028-.032	½pm

For key to abbreviations see page 27

ENGINE TUNE-UP

Make and Model	Year	Set Breaker Gap (Minimum-Maximum)	Breaker Spring Tension (Ounces) (Min.-Max.)	Timing—Deg. B. or A. TDC	Battery—Terminal Grounded	Valve Clearance—Intake (Minimum-Maximum)	Valve Clearance—Exhaust (Minimum-Maximum)	Compression Pressure at Cranking Speed (lbs.)	Spark Plug—Thread Size (mm)	Spark Plug Make—Original Equipment	Spark Plug Model No.	Spark Plug Gap (Minimum-Maximum)	Float Level or Fuel Level
MORRIS (English)													
8 Series E	'48	.010-.012	—	TDC	P	.017H	.017H	140	14	Cha	L-10	.018-.022	3/8
10 Series M	'48	.010-.012	—	TDC	P	.019H	.019H	140	14	Cha	L-10	.018-.022	3/8
Minor	'48	.010-.012	20-24	TDC	P	.017H	.017H	105-110	14	Cha	L-10	.018-.022	3/8(B)
Oxford	'48	.010-.012	20-24	TDC	P	.015H	.015H	105-110	14	Cha	L-10	.018-.022	3/8(B)
Minor	'49	.010-.012	20-24	TDC	P	.017H	.017H	105-110	14	Cha	L-10	.018-.022	3/8(B)
Oxford	'49	.010-.012	20-24	TDC	P	.015H	.015H	105-110	14	Cha	L-10	.018-.022	3/8(B)
Six	'49	.010-.012	20-24	5B	P	.015H	.015H	110-115	14	Cha	L-10	.018-.022	3/8(B)
Minor	'50	.010-.012	20-24	TDC	P	.017H	.017H	105-110	14	Cha	L-10	.018-.022	3/8(B)
Oxford	'50	.010-.012	20-24	TDC	P	.015H	.015H	105-110	14	Cha	L-10	.018-.022	3/8(B)
Six	'50	.010-.012	20-24	5B	P	.015H	.015H	110-115	14	Cha	L-10	.018-.022	3/8(B)
NASH													
Amb. 600	'41	.020	—	TDC	P	.015H	.015H	120	14	AL	AN-7	.025	5/64
Amb. 6	'41	.020	—	6B	P	.015H	.015H	125	14	AC	45	.025	5/8
Amb. 8	'41	.017	—	9B	P	.015H	.015H	110	14	AC	45	.025	5/16
4240-6	'42	.020	—	TDC	P	.015H	.015H	120	14	AL	AN-7	.025	5/64
4260-6	'42	.030	—	4B	P	.015H	.015H	125	14	AC	45	.025	5/8
4280-8	'42	.017	—	7B	P	.015H	.015H	110	14	AC	45	.025	5/16
Six-4640	'46	.020	—	TDC	P	.015H	.015H	120	14	AL	A-5	.025	1/2
Six 4660	'46	.020	—	4B	P	.015H	.015H	125	14	AL	A-5	.025	5/8
Series 4740	'47	.020	18	TDC	P	.015	.015	120	14	AL	A-5	.025	1/2
Series 4760	'47	.020	18	TDC	P	.015	.015	125	14	AL	A-5	.025	5/8
Series 4840	'48	.020	17-20	fd	P	.015	.015	120	14	AL	AN7	.025	❖
Series 4860	'48	.020	17-21	fd	P	.015H	.018H	125	14	AC	45	.025	❖
Series 4940	'49	.018-.024	17-21	TDC	P	.015H	.015H	120	14	AL	A5	.030	3/8
Series 4960	'49	.018-.024	17-21	TDC	P	.015H	.015H	125	14	AC or AL	44orA5	.030	3/8
Canadian Statesman	'50	.018-.022	17-20	TDC	P	.015H	.015H	120	14	AL	A-5	.030	1/2
Statesman (U.S.)	'50	.018-.024	17-21	TDC	P	.015H	.015H	120	14	AL	A-5	.030	1/2
Ambassador (U.S.)	'50	.018-.024	17-21	TDC	P	.015H	.018H	130	14	AC	44	.030	1/2
Rambler (U.S.)	'50	.018-.024	17-21	TDC	P	.015H	.015H	120	14	AL	A-5	.030	1/2
OLDSMOBILE													
Six	'41	.020	—	TDC	N	.008H	.011H	115	14	AC	44	.040	1/2
Eight	'41	.0125	—	2B	N	.008H	.011H	105	14	AC	44	.030	5/16
Six	'42	.020	—	TDC	N	.008H	.011H	102	14	AC	44	.040	9/16
Six (HM)	'42	.020	—	TDC	N	.008H	.011H	102	14	AC	44	.040	1/2
Eights, all	'42	.0125	—	2B	N	.008H	.011H	105	14	AC	44	.030	5/16
Six	'46	.020	—	TDC	N	.008H	.011H	115	14	AC	48	.040	9/16
Eight	'46	.015	—	2B	N	.088H	.011H	107	14	AC	48	.030	5/16
Six	'47	.020	17-21	TDC	N	.008	.011	102(p)	14	AC	48	.040	1/2
Eight	'47	.015	19-23	2B	N	.008	.011	105(p)	14	AC	48	.030	5/16
Six	'48	.020	17-21	TDC	N	.008	.011	102(p)	14	AC	48	.040	1/2
Eight	'48	.015	19-23	2B	N	.008	.011	105(p)	14	AC	48	030	5/16
Six	'49	.020	17-20	TDC	N	.008H	.011H	125	14	AC	45	.040	1/2
Eight	'49	.012-.0175	19-23	2½B	N	None	None	136	14	AC	44	.030	5/16
Eight ("88")	'50	.021	17-21	2½B	N	.002-.004	.002-.004	136	14	AC	45	.040	1/2
Six ("76")	'50	.021	17-21	TDC	N	.002-.004	.002-.004	160f	14	AC	45	.040	1/2

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ENGINE TUNE-UP

Make and Model	Year	Set Breaker Gap (Minimum-Maximum)	Breaker Spring Tension (Ounces) (Min.-Max.)	Timing—Deg. B. or A. TDC	Battery—Terminal Grounded	Valve Clearance—Intake (Minimum-Maximum)	Valve Clearance—Exhaust (Minimum-Maximum)	Compression Pressure at Cranking Speed (lbs.)	Spark Plug—Thread Size (mm)	Spark Plug Make—Original Equipment	Spark Plug Model No.	Spark Plug Gap (Minimum-Maximum)	Float Level or Fuel Level
PACKARD													
Six 110	'41	.020	—	6B	P	.007H	.010H	—	10	f	h	.025	5/8
Eight 120	'41	.017	—	7B	P	.007H	.010H	—	10	f	h	.025	5/32
Super Eight	'41	.017	—	5B	Automatic Take-up			—	10	f	h	.025	5/8
"6"—2000	'42	.018	—	4B	P	.007H	.010H	—	10	f	h	.025	—
"8"—2001	'42	.017	—	5B	P	.007H	.010H	—	10	f	h	.025	5/32
Super Eight	'42	.017	—	4B	Automatic Take-up			—	10	f	h	.025	5/8
2100	'46	.020	—	4B	P	.007H	.010H	—	10	d	—	.025-.030	5/8
2101 & 2111	'46	.015	—	5B	P	.007H	.010H	—	10	d	—	.025-.030	5/32
2103 & 2126	'46	.015	—	4B	Automatic Take-up			—	10	d	—	.025-.030	5/32
2100 & 2130	'47	.020	@17-20	6B	P	.007H	.010H	—	10	d	d	.028	5/8
2101 & 2111	'47	.017	17-20	7B	P	.007H	.010H	110	10	e	e	.028	5/32
2103, 2106 &2126	'47	.017	17-20	6B	Automatic Take-up			108	10	e	e	.028	5/32
2201 & 2211	'48	.0125 .0175	19-23	6B	P	.007	.010	—	10	e	e	.025-.030	5/32∅
2202 & 2232	'48	.0125 .0175	19-23	6B	P	.007	.010	—	10	e	e	.025-.030	5/32∅
2206 & 2233	'48	.0125 .0175	19-23	6B	P	Automatic Take-up		—	10	e	e	.025-.030	5/32∅
2301	'49	.0125-.0175	(a)	6B	P	.007H	.010H	—	10	e	e	.025-.030	5/32∅
2302, 2332	'49	.0125-.0175	(a)	6B	P	.007H	.010H	—	10	e	e	.025-.030	5/32∅
2306, 2333	'49	.0125-.0175	(a)	6B	P	.007H	.010H	—	10	e	e	.025-.030	5/32∅
2301	'50	.0125-.0175	(a)	6B	P	.007H	.010H	—	10	e	e	.025-.030	5/32∅
2302, 2332	'50	.0125-.0175	(a)	6B	P	.007H	.010H	—	10	e	e	.025-.030	5/32∅
2306-2333	'50	.0125-.0175	(a)	6B	P	.007Hp	.010Hp	—	10y	e	e	.025-.030	5/32∅
PLYMOUTH													
Rd K'g P-11	'41	.020	—	TDC	P	.008H	.010H	100	14	AL	A-7	.025	5/64
DeLuxe P-12	'41	.020	—	TDC	P	.008H	.010H	100	14	AL	A-7	.025	5/64
DeLuxe P-14	'42	.020	—	TDC	P	.008H	.010H	130	14	AL	A-7	.025	5/64
Six P-15	'46	.020	—	TDC	P	.008H	.010H	125-135	14	AL	A-5	.025	5/64
P-15	'47	.020-.024	17-20	TDC	P	.008H	.010H	125-135	14	AL	A-5	.025	5/64
P-15	'48	.020-.024	17-20	TDC	P	.008H	.010H	125-135	14	AL	A-5	.025	5/64
P17, P18	'49	.020	17-20	TDC	P	.008H	.010H	125-135	14	AL	AR5	.038(b)	5/64
P19, P-20	'50	.020	17-20	TDC	P	.008H	.010H	125-135	14	AL	AR5	.035c	5/64
PONTIAC													
Fleet & Torpedo 6's	'41	.020	—	4B	N	.012H	.012H	155§	14	AC	45	.025	1/16
Sixes	'42	.020	—	4B	N	.012H	.012H	155§	14	AC	45	.025	7/16
Later Sixes	'42	.020	—	4B	N	.012H	.012H	155§	14	AC	45	.025	11/16‡
Six—All Series	'46	.020	—	4B	N	.012H	.012H	160§	14	AC	45	.025	7/16
Eight—All series	'46	.015	—	4B	N	.012H	.012H	158§	14	AC	45	.025	5/16
Six	'47	.020	17-21	4B	N	.011-.013H	.011-.013H	105-110	14	AC	45	.025	7/16
Eight	'47	.015	19-23	4B	N	.011-.013H	.011-.013H	105-110	14	AC	45	.025	5/16
Six	'48	.020	17-21	4B	N	.011-.013H	.011-.013H	105-110	14	AC	45	.025	7/16
Eight	'48	.015	19-23	4B	N	.011-.013H	.011-.013H	105-110	14	AC	45	.025	3/16
Six 2000,2200,2500	'49	.020	17-21	2-6B	N	.011-.013H	.011-.013H	160	14	AC	45	.023-.028	7/16
Eight	'49	.015	19-23	2-6B	N	.011-.013H	.011-.013H	158	14	AC	45	.023-.028	3/16
Six-2000, 2200, 2500	'50	.022	17-21	6B	N	.011-.013H	.011-.013H	160	14	AC	45	.023-.028	7/16
Eight-2700	'50	.016	19-23	6B	N	.011-.013H	.011-.013H	156	14	AC	45	.023-.028	3/16

N.B. Fleetleaders (1941-2-6-7-8) are 20 and 22 Series; Torpedo 6 & 8 (1941-2-6-7-8) are 25 and 27 Series respectively.
Streamliner 6 & 8 (1941-2-6-7-8) are 26 and 28 Series respectively; Streamliner 6 & 8 (1948) not distributed in Canada.

For key to abbreviations see page 27

ENGINE TUNE-UP

Make and Model	Year	Set Breaker Gap (Minimum-Maximum)	Breaker Spring Tension (Ounces) (Min.-Max.)	Timing—Deg. B. or A. TDC	Battery—Terminal Grounded	Valve Clearance—Intake (Minimum-Maximum)	Valve Clearance—Exhaust (Minimum-Maximum)	Compression Pressure at Cranking Speed (lbs.)	Spark Plug—Thread Size (mm)	Spark Plug Make—Original Equipment	Spark Plug Model No.	Spark Plug Gap (Minimum-Maximum)	Float Level or Fuel Level
REFECT (English)													
our Cylinder	'49	.010-.012	18-22	5B	P	.0115-.013	5.015-.017	104(p)	14	Cha	L-10	.020-.022	669a
our Cylinder	'50	.010-.012	18-22	5B	P	.011-.013	.015-.017	104	14	Cha	L-10	.020-.022	.669
RILEY (English)													
100 hp 2½-Li re	'49	.012-.015	—	8B	P	.003H	.004H	—	14	Cha	NA-8	.030	—
1½ Litre	'46-'50	.012-.015	—	8B	P	.003H	.004H	115	14	Cha	L-10S	.030	11/32D
2½ Litre	'47-'50	.012-.015	20-24	4-8B	P	.003H	.004H	125	14	Cha	NA8	.030	11/32D
ROVER (English)													
75	'49	.012	20	11B	P	.010	.012	140	14	L-HLNR	HLNR	.023-.026	—
75	'50	.012	20	8B	P	.008	.012	140	14	L	HLNR	.023-.026	1/2r
Land Rover	'50	.012	20	15B	P	.010	.012	140	14	L	HLNR	.023-.026	19—
STUDEBAKER													
Champion 3G	'41	.020	—	2B	P	.016C	.016C	105	14	Cha	J-8	.025	5/16
Comm. 6 (11A)	'41	.020	—	2B	P	.016C	.016C	105	18	Cha	8	.025	5/8
Pres. 8 (7C)	'41	.020	—	TDC	P	.016C	.016C	105	18	Cha	8	.025	5/8
Champion 4G	'42	.020	—	2B	P	.016C	.016C	105	14	Cha	J-9	.025	5/16
Comm. 6 (12A)	'42	.020	—	2B	P	.016C	.016C	105	14	Cha	J-9	.025	5/8
Pres. 8 (8C)	'42	.020	—	TDC	P	.016C	.016C	105	14	Cha	J-9	.025	5/8
Six 5G	'46	.020	—	2B	P	.016C	.016C	150	14	Cha	J-9	.025	1/4
Champ.—6G	'47	.020	17-20	2B	P	.016C	.016C	105	14	Cha	J-9	.025	1/4 ❖
Comm.—14A	'47	.020	17-20	2B	P	.016C	.016C	105	14	Cha	J-9	.025	1/4 ❖
Champ.—6G	'48	.020	17-20	2B	P	.0015	.0035	105(x)	14	Cha	J-7 or 9	†	5/8
Comm.—15A	'48	.020	17-20	9/64B	P	.0015	.0305	105(x)	14	Cha	J-7 or 9	†	5/8
Champion - 8G	'49	.020	17-20	2B	P	.016C	.016C	105	14	Cha	J7 or 9	.0225	3/8°°
Commander-16A	'49	.020	17-20	9/64B	P	.016C	.016C	105	14	Cha	J7 or 9	.0225	5/8°°
Champion 9G	'50	.020	17-20	2B	P	.016C	.016C	120	14	Cha	J-7	.022-.027	3/8°°
Commander 17A	'50	.022	17-21	2B	P	.016C	.016C	120	14	Cha	J-7	.022-.027	5/8°°
SUNBEAM TALBOT (English)													
90	'49	.010-.012	—	1B	P	.007	.009	130	14	Cha	NA-8	.028-.032	—
Talbot-90	'50	.010-.012	—	1B	P	.007	.009	121-125	14	Cha	NA8	.028-.032	—
TRIUMPH (English)													
Series TRD (1800)	'47-'48	.012	—	8B	P	.012	.012	—	14	Cha	N-8	.038-.040	—
Series TRA	'49	.012	—	TDC	P	.010	.012	—	14	Cha	L-10	.024-.028	—
VANGUARD (English)													
Sedan & Est. car	'49	.012	—	TDC	P	.010	.012	120	14	Cha	L-10	.024-.028	(n)
Sedan & Est. car	'50	.012	—	TDC	P	.010	.012	120	14	Cha	L-10	.024-.028	(n)
VAUXHALL LIP (English)													
Velox	'49	.012-.014	22-24	2B	P	.006H	.013H	110-120°	14	AC	VF9	.028-.030	n
Velox	'50	.012-.014	22-24	2B	P	.006H	.013H	110-120	14	AC	VF9	.028-.030	n
WILLYS													
Americar	'41	.020	—	TDC	N	.014C	.014C	111	14	b	b	.025	3/8
Americar	'42	.020	—	TDC	N	.014C	.014C	111	14	Cha	J-9	.025	3/8

For key to abbreviations see page 27

ENGINE TUNE-UP

Make and Model	Year	Set Breaker Gap (Minimum-Maximum)	Breaker Spring Tension (Ounces) (Min.-Max.)	Timing—Deg. B. or A. TDC	Battery—Terminal Grounded	Valve Clearance—Intake (Minimum-Maximum)	Valve Clearance—Exhaust (Minimum-Maximum)	Compression Pressure at Cranking Speed (lbs.)	Spark Plug—Thread Size (mm)	Spark Plug Make—Original Equipment	Spark Plug Model No.	Spark Plug Gap (Minimum-Maximum)	Float Level or Fuel Level
WILLYS—(Continued)													
CJ-2A Univ. Jeep	'45	.020	—	TDC(z)	N	.014	.014	111	14	AL	AN-7	.030	3/8
CJ-2A Univ. Jeep	'47	.020	17-20	TDC	N	.014C	.014C	111	14	AL	AN-7	.030	3/8
CJ-2A-2WD-4WD	'48	.020(b)	17-20	5B	N	.014	.014	115	14	AL, Cha	AN7,J9	.030	3/8
4-63	'48	.020(b)	17-20	5B	N	.014	.014	115	14	AL, Cha	AN7,J9	.030	5/16
6-63	'48	.020(b)	17-20	TDC	N	.014	.014	117	14	AL, Cha	AN7,J9	.020	5/16
CJ-2A, 2WD&4WD	'49	.020(b)	17-20	5B	N	.016	.016	115	14	AL, Cha	AN7,J9	.030	3/8 w
4-63	'49	.020(b)	17-20	5B	N	.016	.016	115	14	AL, Cha	AN7,J9	.030	5/16 W
6-63	'49	.020(b)	17-20	TDC	N	.016	.016	117	14	AL, Cha	AN7,J9	.030	5/16 W
CJ-3A	'49	.020(b)	17-20	5B	N	.016	.016	115	14	AL, Cha	AN7,J9	.030	3/8 W
4-73 Sta. Wgn.	'50	.020	17-20	TDC	N	.0007-.002	.002-.004	135	14	Cha	J-7	.030	5/16
4x4-63 Sta. Wgn.	'50	.020	17-20	TDC	N	.001-.003	.002-.004	—	14	Cha	J-9	.030	9/32
6-73 Sta. Wgn.	'50	.020	17-20	TDC	N	.001-.003	.002-.004	145	14	Cha	J-7	.030	—
4-73 VJ Jeepster	'50	.020	17-20	TDC	N	.0007-.002	.002-.004	135	14	Cha	J-7	.030	5/16
6-73 VJ Jeepster	'50	.020	17-20	TDC	N	.001-.003	.002-.004	145	14	Cha	J-7	.030	—
WOLSELEY (English)													
Four-Fifty	'49	.010-.012	—	TDC	P	.015H	.015H	—	14	Cha	L-10	.018-.022	—
Six-Eighty	'49	.010-.012	—	TDC	P	.015H	.015H	—	14	Cha	L-10	.018-.022	—
Six-Eighty	'48-'50	.010-.012	20-24	5B	P	.015H	.015H	110-115	14	Cha	L-10	.018-.022	3/4(B)
Four-Fifty	'48-'50	.010-.012	20-24	5B	P	.015H	.015H	110-115	14	Cha	L-10	.018-.022	3/4(B)

ABBREVIATIONS

a—Below top of float chamber.
(a)—Delco-Remy 17-21 ozs.
@—Delco-Remy 19-23 ozs.
A—After top dead centre.
AL—Auto-Lite.
b—Auto-Lite or Champion J-8.
(b)—Plus or minus .002.
B-Before top dead centre.
(B)—1/8 inch below top of jet.
c—Between top of float and gasket inverted.
(c)—Plus or minus .001.
C—Cold.
(C)—For D34, For D35, D36, 5/64".
Cha—Champion.
d—AC 104, or Champion Y4A.
D—Below face.
e—AC 104, or Champion Y4A, or Auto-Lite P4.
E—Throttle open.
f—AC or Champion.
fd—Timing mark on rim front dampener.
(f)—5/16-inch from top of boss to top of seam.
F—At 125 r.p.m.
FL—Carter 574S—1/2 inch; 610S—5/16 inch; 622S—3/8 inch; 622SA—3/8 inch; 685SA—9/64 inch; measured from top of boss to top of float seam, float assembly cover inverted.
(F)—From fuel level to air horn gasket surface.
g—Champion Y4, or AC 103-S.
h—AC 104, or Champion Y4.
(h)—Aluminum head H-10.
H—Hot.
(H)—Float level .66-.77".
K—Series 492 float level 1/16 inch.
L—Lodge.
m—Minimum.
n—Non-adjustable.
N—Negative.
p—Models 2302, 2232 with suffix letter "F" equipped with hydraulic valve lifters.
pm—Plus or minus 1/20".
(p)—Plus or minus 10.
P—Positive.
PP—Pre-set.
r—From float chamber rim.
T—Cha L-10S or K.L.G. E80, or Lodge HN or HNP.
TDC—Top dead centre.
w—Measured from top of float to bottom of float bowl cover.
W—Measured from seam on top of float to bottom of float bowl cover.
x—With engine at operating temperature.
X—From face of air horn gasket to top of raised seam encircling each float.
y—Late 23rd series 14mm. AL-A58, Cha J-8, AC 44-5.
(x)—Engine idling.
z—.004"B (piston travel).
(z)—72 octane fuel 5°BTDC.
*—"A" distributor 12°BTDC; "B" and "C" distributors 8°BTDC.
°—At 200 r.p.m.
°°—Distance from seam of float (at free end) to tip on lower edge of float chamber cover when needle is seated to be 3/8 inch.
†—.0225-.0275.
††—Float level Stromberg 5/8 inch; Carter 9/64 inch.
‡—W-1 carburetors 521S, or 545S.
§—At 1,000 r.p.m.
#—.010C up to engine No. 10769; .014C after.
✤—Measured from boss on float cover to far edge of float seam.
✤✤—1/2 inch from lip of seam free edge of float to machined lip of cover.
✤✤✤—3/8 inch from seam of float to raised spot on cover.
Ø—Below top of bowl.
(1)—Up to engine No. P200 Cha L-10S.
(2)—Or Cha L-10.

PISTON PINS AND CONNECTING RODS

Make and Model	Year	Piston Pins—Diameter	Piston Pins—Locking Method	Piston Pins—Clearance (Minimum-Maximum)	Connecting Rod Forging Number	Conn. Rod Bearings—Diameter and Length	Conn. Rod Bearings—Clearance (Min.-Max.)	Conn. Rod Bearings—End Play (Min.-Max.)	Direct Babbitt or Precision Insert	Pistons and Rods removed from above or below
ANGLIA (English)		**PISTON PINS**				**CONNECTING RODS**				
Four Cylinder	'49	.6876-.6879	Lr	.0001-.0003	—	1.5000-1.5005	.001-.0025	.004-.010	DB	A
					—	x1.180-1.182				
Four Cylinder	'50	.6876-.6879	Lr	PF	—	D1.500x1.505 L1.180x1.182	.001-.003	.004-.010	DB	A
AUSTIN (English)										
AUSTIN (English)										
A-40	'48	.6244	R	—	—	—	—	—	PI	A
A-40 Devon&Dorset	'49	.6244-.6246	R	pp	—	—	.00025-.0015	.0085-.0125	PI	B
A-40 Devon&Dorset	'50	.6244-.6246	R	PUFf	—	1.7499-1.7500	.00025-.0015	.0085-.0125	PI	A
BUICK										
Spec. 44; Super 45	'41	.8724	R	.0003	—	2x1.212	.0008	.005	Spun	A
Series 46, 47, 49	'41	.8744	R	.0003	—	2 1/4x1.306	.0008	.005	Spun	A
Series 44	'42	.8124	R	.0003	—	2x1.212	.0008	.005	Spun	A
Series 46	'42	.8744	R	.0003	—	2 1/4x1.306	.0008	.005	Spun	A
Series 50	'46	.8125	R	.00035	—	2x1 7/32	.0013	.0075	Spun	A
Series 70	'46	.8750	R	.00035	—	2 1/4x1 5/16	.0013	.0075	Spun	A
Series 40	'47	.8125	R	.0003-.0004	—	2x1.212	.0008-.0018	.005-.010	DB	A
Series 50	'47	.8125	R	.0003-.0004	—	2x1.212	.0008-.0018	.005-.010	DB	A
Series 70	'47	.8750	R	.0003-.0004	—	2 1/4x1.306	.0008-.0018	.005-.010	DB	A
Series 40, 50, 70	'48	(Not distributed in Canada)								
Series 40, 50, 70	'49	(Not distributed in Canada)								
Series 40, 50, 70	'50	(Not distributed in Canada)								
CADILLAC										
All series	'41	7/8	F	yy	—					
All series	'42	7/8	F	yy	—	2.460x2 1/32	.0015	.003	Sep	A
V-8	'46	7/8	F	yy	—	2.460x2 1/32	.0015	.003	Sep	A
V-8	'47	7/8	F	yy	—	2.459x2.294	.0015	.0045	Sep	A
V-8	'48	(Not distributed in Canada)				2.459x2.294	.0005-.0020	.008-.014	PI	A
V-8	'49	(Not distributed in Canada)								
V-8	'50	(Not distributed in Canada)								
CHEVROLET										
Six	'41	.865	R	SF	—	2 5/16x1 1/2	.0010	.0065	Spun	A
Six	'42	.865	R	SF	—	2 5/16x1 1/2	.0010	.0065	Spun	A
Six	'46	.865	R	SF	—	2 5/16x1 1/2	.0010	.0080	Spun	A
Six	'47	.8645	R	SF	—	2 5/16x1 1/2	.0010	.004-.011	DB	A
Six	'48	.8645	R	SF	—	2.314x1.432	SF	.004-.012	DB	A
Six	'49	.8645-.8650	R	SF	—	2.311x1.436	.0003-.0013	.004-.012	SB	A
Six	'50	.8645-.8650	R	SF	3835274	2.11x13.436	.0003-.0013	.004-.012	DB	A
CHRYSLER										
Royal 6 C-28	'41	55/64	F	FP	—	2 1/8x1 7/32	.0005	.0055	Sep	A
New Yorker C-30	'41	55/64	F	FP	—	2 3/8x1 1/8	.0010	.006	Sep	A
Crown Imp. 8C-33	'41	55/64	F	FP	—	2 5/16x1 1/8	.0010	.006	Sep	A
Royal 6 C-34	'42	55/64	F	FP	—	2 1/8x1 7/32	.0005	.0055	Sep	A
New Yorker C-36	'42	55/64	F	FP	—	2 3/8x1 1/8	.0010	.006	Sep	A

(*Continued on page 30*)

For key to abbreviations see page 37

PISTON PINS AND CONNECTING RODS

Make and Model	Year	Piston Pins—Diameter	Piston Pins—Locking Method	Piston Pins—Clearance (Minimum-Maximum)	Connecting Rod Forging Number	Conn. Rod Bearings—Diameter and Length	Conn. Rod Bearings—Clearance (Min.-Max.)	Conn. Rod Bearings—End Play (Min.-Max.)	Direct Babbitt or Precision Insert	Pistons and Rods removed from above or below
CHRYSLER—(Continued)			PISTON PINS			CONNECTING RODS				
Crown Imp. 8 C-37	'42	55/64	F	FP	—	2 5/16x1 1/8	.0010	.006	Sep	A
C-38W, C-38S	'45	55/64	F	FP	—	2 1/8x1 7/32	.001-.0015	.0055-.0115	Sep	A
Six C-38W, C-38S	'47	55/64	F	TP	—	2 1/8x1 7/32	.0005-.0025	.0055-.0115	PI	A
Eight C-39, C-40	'47	55/64	F	TP	—	2 5/16x1 1/8	.0005-.0015	.006-.011	PI	A
Six 38W, C-38S	'48	55/64	F	TP	—	2 1/8x1 7/32	.0005-.0025	.0055-.0115	PI	A
Eight C-39, C-40	'48	55/64	F	TP	—	2 5/16x1 1/8	.0005-.0015	.006-.011	PI	A
Six-C45	'49	55/64	F	FP	—	2 1/8x1 7/32	.005-.0025	.0055-.011	PI	A
Eight C-46, C-47	'49	55/64	F	FP	—	2 5/16x1 1/8	.005-.0015	.006-.011	PI	A
Six	'50	55/64	F	tp	666746, 954428	2 1/8x1 7/32	.0005-.0025	.0055-.011	PI	A
Eight	'50	55/64	F	tp	621920, 954429	2 5/16x1 1/8	.0005-.0015	.006-.011	PI	A
CROSLEY										
CC(Up to 41547)	'47	5/8	F	TP	—	1.375x.870	.0015-.003	.010-.025	PI	B
CC,CD(to 106039)	'48	5/8	F	TP	—	1.375x.870	.0015-.003	.010-.025	PI	B
CD(After 106039)	'49	5/8	F	TP	—	1.375x.870	.0015-.003	.010-.025	PI	B
Crosley	'50	.6250-.6252	F	.0003-.0004c	PC-7240	1.375x.870	.0015-.003	.010-.025	PI	B
DE SOTO										
Six S-8	'41	55/64	F	FP	—	2 1/8x1 7/32	.0005	.0055	Sep	A
Six S-10	'42	55/64	F	FP	—	2 1/8x1 7/32	.0005	.0055	Sep	A
S-11	'46	55/64	F	FP	—	2 1/8x1 7/32	.001-.0015	.006-.011	Sep	A
S-11	'47	55/64	F	TP	—	2 1/8x1 7/32	.0005-.0025	.0055-.0115	PI	A
S-11	'48	55/64	F	TP	—	2 1/8x1 7/32	.0005-.0025	.0055-.0115	PI	A
S-13 Custom	'49	55/64	F	TP	—	2 1/8x1 7/32	.0005-.0025	.0055-.0115	PI	A
S-14	'50	55/64	F	TP	565679, 954418	2 1/8x1 7/32	.0005-.0025	.0055-.011	PI	A
DODGE										
Kingsway 6 D-20	'41	55/64	F	FP	—	2 1/8x1 7/32	.0005	.0055	Sep	A
De Luxe 6 D-21	'41	55/64	F	FP	—	2 1/8x1 7/32	.0005	.0055	Sep	A
Luxury Liner 6D-19	'41	55/64	F	FP	—	2 1/8x1 7/32	.0005	.0055	Sep	A
De Luxe D-2B	'42	55/64	F	FP	—	2 1/8x1 7/32	.0005	.0055	Sep	A
Custom D-22	'42	55/64	F	FP	—	2 1/8x1 7/32	.0005	.0055	Sep	A
D-25	'46	55/64	F	FP	—	2 1/8x1 7/32	.001-.0015	.0055-.0115	Sep	A
D-24	'46	55/64	F	FP	—	2 1/8x1 7/32	.001-.0015	.0055-.0115	Sep	A
D-25	'47	55/64	F	TP	—	2 1/8x1 7/32	.0005-.0025	.0055-.0115	PI	A
D-24	'47	55/64	F	TP	—	2 1/8x1 7/32	.0005-.0025	.0055-.0115	PI	A
D-25	'48	55/64	F	TP	—	2 1/8x1 7/32	.0005-.0025	.0055-.0115	PI	A
D-24	'48	55/64	F	TP	—	2 1/8x1 7/32	.0005-.0025	.0055-.0115	PI	A
D-30	'49	55/64	F	TP	—	2 1/8x1 7/32	.0005-.0025	.0055-.0115	PI	A
D-31, D-32	'49	55/64	F	TP	—	2 1/8x1 7/32	.0005-.0025	.0055-.0115	PI	A
D34-D35-D36	'50	55/64	F	TP	868896, 954408	2 1/8x1 7/32	.0005-.0025	.0055-.011	PI	A
FORD										
V-8, 85	'41	3/4	F	.0002	—	a	.0015	.005	F	A
V-8, 85	'42	3/4	F	.0002	—	a	.0015	.005	F	A
Ford De Luxe	'46	.7505	F	.0000-.0003S	—	2.00x.84	.0003-.0028	.006-.014	R	A
Super De Luxe	'46	.7505	F	.0000-.0003S	—	2.00x8.4	.0003-.0028	.006-.014	R	A
DeL. & Super DeL.	'47	.7505	F	.0000-.0003S	—	2.14x.84	.0003-.0028	.006-.014	PI	A

For key to abbreviations see page 37

PISTON PINS AND CONNECTING RODS

Make and Mode	Year	Piston Pins—Diameter	Piston Pins—Locking Method	Piston Pins—Clearance (Minimum-Maximum)	Connecting Rod Forging Number	Conn. Rod Bearings—Diameter and Length	Conn. Rod Bearings—Clearance (Min.-Max.)	Conn. Rod Bearings—End Play (Min.-Max.)	Direct Babbitt or Precision Insert	Pistons and Rods removed from above or below
FORD—(Continued)				**PISTON PINS**		**CONNECTING RODS**				
DeL. & Super DeL.	'48	.7505	F	.0000-.0003S	—	2.14x.84	.0003-.0028	.006-.014	PI	A
V-8	'49	.7505	F	.0000-.0003f	—	2.14x.84	.0003-.0028	.006-.014	PI	A
V-8	'50	.7504	Lr	.0000FP(f)	8BA 6200B	2.1385x1.75	.0005-.0030	.006-.020	PI	A
FRAZER										
F-47	'47	.913-.914	Lr	.1858-.2045	—	2.1882-2.1902 x1.3035-1.3055	.0005-.0023	.002-.004	DB	A
F-47-47C-485-486	'48	55/64	P	pc	—	1.0316x1⅛	.0005-.0023	.006-.010	PI	A
Series F-495, 496	'49	.8593	Lr	(pc)	—	2.0619-2.0627 x1 5/16	.0015-.002	.005-.015	PI	A
Series F-495, 496	'50	.8593	Lr	(pc)	F600D-310	2.0619-2.0627 x1 5/16	.0015-.002	.005-.015	PI	A
HILLMAN MINX (English)										
Mark III	'49	.6299-.6296	R	.001	—	1.625 HM	.0005-.002	.002-.004	PI	B
Mark IV	'50	.6298	F	PUF	—	1.6245-1.6250 x.905-.915	.0005-.002	.0079-.0014	PI	B
HUDSON										
Six 10	'41	¾	F	.0003	—	1 15/16x1⅜	.0003	.007	Spun	A
S x 11, 12	'41	¾	F	.0003	—	1 15/16x1⅜	.0003	.007	Spun	A
Six 18	'41	¾	F	.0003	—	1 15/16x1⅜	.0003	.007	Spun	A
Sight	'41	¾	F	.0003	—	1 15/16x1⅜	.0003	.007	Spun	A
"6"—20 Sp.	'42	¾	F	.0003	—	1 15/16x1⅜	.0003	.007	Spun	A
"6"—20P, 21, 22	'42	¾	F	.0003	—	1 15/16x1⅜	.0003	.007	Spun	A
"6"—28	'42	¾	F	.0003	—	1 15/16x1⅜	.0003	.007	Spun	A
"8"	'42	¾	F	.0003	—	1 15/16x1⅜	.0003	.007	Spun	A
Six—51, 52	'46	¾	F	.0003	—	1 15/16x1⅜	.0005	.010	Spun	A
Eight—53, 54	'46	¾	F	.0003	—	1 15/16x1⅜	.0005	.010	Spun	A
Six—171, 172	'47	¾	F	.0003	—	1 15/16x1⅜	.0003-.0006	.007-.013	DB	A
Eight—173, 174	'47	¾	F	.0003	—	1 15/16x1⅜	.0003-.0006	.007-.013	DB	A
Series 481, 482	'48	31/32	Lr	pf	—	2.125x1.625	—	.007-.013	PI	A
Series 483, 484	'48	¾	Lr	pf	—	1.9375x1.375	—	.007-.013	SB	A
Series 491, 492	'49	31/32(.968)	Lr	pf	—	2.125x1.625	—	.007-.013	PI	A
Series 493, 494	'49	¾(.75)	Lr	pf	—	1.9375x1.375	—	.007-.013	SB	A
Series 500, 501, 502	'50	.968	Lr	H	302609, 157369	2⅛x1⅝	.005-.0015	.007-.013	PI	A
Series 503, 504	'50	.750	Lr	H	302609, 157369	1 5/16x1⅜	.003-.006	.003-.006	SP	A
HUMBER HAWK (English)										
Super Snipe Mk. II	'48	24m	F	PUF	—	2.125-1.23	.0013-.0015	.0058	PI	—
Hawk Mk. III	'49	24m	F	PUF	—	1.9375-1.314	.00125-.0025	.008	PI	—
Mark III	'49	.9449x.9447	R	—	—	1.93775x1.3145	—	—	PI	B
Pullman Mk. II	'49	24m	F	PUF	—	2.125-1.23	.0013-.0015	.0058	PI	—
Super Snipe Mk. II	'49	24m	F	PUF	—	2.125-1.23	.0013-.0015	.0058	PI	—
Hawk Mk. III	'50	24m	F	PUF	—	1.9375-1.314	.00125-.0025	.008	PI	—
Pullman Mk. II	'50	24m	F	PUF	—	2.125-1.23	.0013-.0015	.0058	PI	—
Super Snipe Mk. II	'50	24m	F	PUF	—	2.125-1.23	.0013-.0015	.0058	PI	—

For key to abbreviations see page 37

PISTON PINS AND CONNECTING RODS

Make and Mode	Year	Piston Pins—Diameter	Piston Pins—Locking Method	Piston Pins—Clearance (Minimum-Maximum)	Connecting Rod Forging Number	Conn. Rod Bearings—Diameter and Length	Conn. Rod Bearings—Clearance (Min.-Max.)	Conn. Rod Bearings—End Play (Min.-Max.)	Direct Babbitt or Precision Insert	Pistons and Rods removed from above or below
JAGUAR (English)		**PISTON PINS**				**CONNECTING RODS**				
1½ Litre. Sal.	'46-'48	.7501-.7498	F	PUF	—	1.895-1.896	.001-.0025	.006-.00875	PI	B
2½ Litre. S&C.	'46-'48	.7501-.7498	F	j	—	1.895-1.896	.001-.0025	.006-.00875	PI	B
3½ Litre. S&C.	'46-'48	.8751-.8748	F	j	—	2.0872-2.0885	.001-.0025	.006-.00875	PI	A
2½ Litre S&C. Mk. V	'49	.7501-.7498	F	j	—	1.895-1.896	.001-.0025	.006-.00875	PI	B
3½ Litre. S&C. Mk. V	'49	.8751-.8748	F	j	—	2.0872-2.0885	.001-.0025	.006-.00875	PI	A
3½ Litre. XK. 120	'49	.8751-.8748	F	J	—	2.0872-2.0885	.001-.0025	.006-.00875	PI	A
KAISER										
K-100	'47	.913-.914	Lr	.1858-2.045	—	2.1882-2.1902 x1.3035-1.3055	.0005-.0023	.002-.004	DB	A
K-100-101-48'-482	'48	5/64	P	pc	—	1.0316x1⅛	.0005-.0023	.006-.010	PI	A
Series K 491, 492	'49	.8593	Lr	(pc)	—	2.0619-2.0627	.0015-.002	.005-.015	PI	A
K-491, 492	'50	.8593	Lr	(pc)	F600G-402	2.0619-2.0627 x15/16	.0015-.002	.005-.015	PI	A
LINCOLN										
Lincoln, Continental	'41	¾	F	.0005	—	2⅛x7⅛	.001-.0025	.002	Sep	A
Lincoln, Linc. Cont.	'47	.7502	F	p;r	—	2.250x.787	.001-.0025	.014	PI	A
Lincoln, Linc. Cont.	'48	.7502	F	p;r	—	2.250-.787	.001-.0025	.014	PI	A
Lincoln, Linc. Cont.	'49	(Not distributed in Canada)								
Linc. & Linc. Cont.	'50	(Not distributed in Canada)								
MERCURY										
Mercury	'41	¾	F	.0002	—	b	.0015	.004	F	A
Mercury	'42	¾	F	.0002	—	b	.0015	.004	F	A
114&114X	'46	.7505	F	.0000-.0003S	—	2.00x.84	.0003-.0028	.006-.014	R	A
118	'46	.7505	F	.0000-.0003S	—	2.14x.84	.0003-.0028	.006-.014	R	A
114, 114X & 118	'47	.7505	F	.0000-.0003S	—	2.14x.84	.0003-.0028	.006-.014	PI	A
114, 114X & 118	'48	.7505	F	.0000-.0003S	—	2.14x.84	.0003-.0028	.006-.014	PI	A
Mercury	'49	.7505	FLr	x	—	2.14x.84	.0003-.0028	.006-.014	PI	A
Mercury	'50	.7504	Lr	FP	8cm-6200B	2.1385x1.75	.0005-.0030	.006-.020	PI	A
METEOR										
Meteor	'49	.7505	F	.0000-.0003f	—	2.14x.84	.0003-.0028	.006-.014	PI	A
Meteor	'50	.7504	Lr	FP (m)	8BA-6200B	2.1385x1¾	.0005-.0030	.006-.020	PI	A
M G (English)										
T.C.	'48	18m	R	TP	—					
Series Y	'49	18m	R	TP						
Series TD	'50	18m	CB	.0003	—	45m-28m	.011-.056	.120-.150	PI	B
Series Y	'50	18m	CB	.0003	—	45m-28m	.011-.056	.120-.150	PI	B
MONARCH										
V-8	'46	.7505	F	.0000-.0003S	—	2.14x.84	.0003-.0028	.006-.014	R	A
V-8	'47	.7505	F	.0000-.0003S	—	2.14x.84	.0003-.0028	.006-.014	PI	A
V-8	'48	.7505	F	.000-.0003S	—	2.14x.84	.0003-.0028	.006-.014	PI	A
V-8	'49	.7505	FLr	x						
V-8	'50	.7504	Lr	.0000-.0002	29A-6205	2.1385x1.75	.0005-.0030	.006-.020	PI	A

For key to abbreviations see page 37

PISTON PINS AND CONNECTING RODS

Make and Model	Year	Piston Pins—Diameter	Piston Pins—Locking Method	Piston Pins—Clearance (Minimum-Maximum)	Connecting Rod Forging Number	Conn. Rod Bearings—Diameter and Length	Conn. Rod Bearings—Clearance (Min.-Max.)	Conn. Rod Bearings—End Play (Min.-Max.)	Direct Babbitt or Precision Insert	Pistons and Rods removed from above or below
MORRIS (English)		PISTON PINS				CONNECTING RODS				
8 Series E	'48	.591	R	y						
10 Series M	'48	.630	R	y						
Minor	'48	15m	CB	PUF	—	40mx27m	.001-.002	.004-.006	PI	B
Oxford	'48	.75	CB	PUF	—	2x1.25	.001-.003	.004-.006	PI	A
Minor	'49	15m	CB	PUF	—	40mx27m	.001-.002	.004-.006	PI	B
Oxford	'49	.75	CB	PUF	—	2x1.25	.001-.003	.004-.006	PI	A
Six	'49	.75	CB	PUF	—	2.0-1.25	.001-.003	.0035-.0065	PI	A
Minor	'50	15m	CB	PUF	—	40mx27m	.001-.002	.004-.006	PI	B
Oxford	'50	.75	CB	PUF	—	2x1.25	.001-.003	.004-.006	PI	A
Six	'50	.75	CB	PUF	—	2.0x1.25	.001-.003	.0035-.0065	PI	A
NASH										
Ambassador 600	'41	13/16	F	.0001	—	1.875x1 1/4	.0015	.004	Sep	A
Ambassador 6	'41	7/8	F	.0001	—	2x1 27/64	.0015	.008	Sep	A
Ambassador 8	'41	7/8	F	.0001	—	2x1 1/4	.0015	.008	Sep	A
4240—"6"	'42	13/16	F	.0001	—	2x1 1/4	.0015	.004	Sep	A
4260—"6"	'42	7/8	F	.0001	—	2x1 27/64	.0015	.008	Sep	A
4280—"8"	'42	7/8	F	.0001	—	2x1 1/4	.0015	.008	Sep	A
Series 4640	'46	13/16	F	.0010	—	1 7/8x1 1/4	.0017	.009	Sep	A
Series 4660	'46	7/8	F	.0010	—	2.002x1.426	.0020	.010	Sep	A
Series 4740	'47	13/16	F	S	—	1 7/8x1 1/4	.0015-.002	.006-.012	PI	A
Series 4760	'47	7/8	F	S	—	2.002x1.436	.0015-.0025	.006-.014	PI	A
Series 4840	'48	.8125	P	pp	—	1 7/8x1 1/4	.0015-.002	.006-.012	PI	A
Series 4860	'48	.875	P	pp	—	2.002x1.436	.0015-.0025	.006-.014	PI	A
Series 4940	'49	.8593-.8595	P	.0003M	—	2 3/8x1 1/8	.001-.002	.006-.014	PI	A
Series 4960	'49	.8746	F	S	—	2.000-2.001x1 1/16	.001-.002	.006-.014	Sep	A
Candn. Statesman	'50	.8593-.8595	LB	.0003M	—	—	.001-.0025	.006-.014	PI	A
Statesman (U.S.)	'50	—	LB	.0003M	—	2.094x	.001-.0025	.006-.014	PI	A
Ambassador (U.S.)	'50	—	Lr	pf	3105354	2x	.001-.0025	.006-.014	PI	A
Rambler (U.S.)	'50	—	LB	.0003M	—	—	.001-.0025	.006-.014	PI	A
OLDSMOBILE										
Six	'41	55/64	P	.0003	—	2 1/8x1 1/4	.0015	.0055	Sep	A
Eight	'41	55/64	P	.0003	—	2 1/8x1 3/8	.0015	.0055	Sep	A
Six	'42	55/64	P	.0003	—	2 1/8x1 1/4	.0015	.0055	Sep	A
Eight	'42	55/64	P	.0003	—	2 1/8x1 3/8	.0015	.0055	Sep	A
Six	'46	55/64	P	.0003	—	2 1/8x1 1/4	.0015	.0080	Sep	A
Eight	'46	55/64	P	.0003	—	2 1/8x1 1/4	.0015	.0080	Sep	A
Six	'47	.8554-.8557	P	.0003-.0006∅	—	2.1245x2.1255	.0005-.0025	.0055-.0105	PI	A
Eight	'47	.8554-.8557	P	.0003-.0006∅	—	2.1245x2.1255	.0005-.0025	.0055-.0105	PI	A
Six	'48	.8554-.8557	P	.0003-.0006∅	—	2.1245x2.1255	.0005-.0025	.0055-.0105	PI	A
Eight	'48	.8554-.8557	P	.0003-.0006∅	—	2.1245x.1255	.0005-.0025	.0055-.0105	PI	A
Six	'49	.855	P	.0002to —.0001	—	2.353x1.125	.0005-.0025	.0055-.0105	Sep	A
Eight	'49	.9805	F	.0002-.0000	—	2 1/4x2	.0009-.0029	.002-.011	Sep	A
Eight ("88")	'50	.9805	F	O	410991	2 1/4x2	.0009-.0029	.002-.011	Sep	A
Six ("76")	'50	.8555	P	∅	B104, 5, 7	2.353-1.128	.00075-.0015	.0055-.0105	Sep	A
PACKARD										
110	'41	7/8	F	PF	—	2 3/32x1 1/4	.0005	.004	Sep	A
120	'41	7/8	F	PF	—	2 3/32x1 1/4	.0005	.004	Sep	A

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PISTON PINS AND CONNECTING RODS

Make and Model	Year	Piston Pins—Diameter	Piston Pins—Locking Method	Piston Pins—Clearance (Minimum-Maximum)	Connecting Rod Forging Number	Conn. Rod Bearings—Diameter and Length	Conn. Rod Bearings—Clearance (Min.-Max.)	Conn. Rod Bearings—End Play (Min.-Max.)	Direct Babbitt or Precision Insert	Pistons and Rods removed from above or below
PACKARD—(Continued)				**PISTON PINS**		**CONNECTING RODS**				
Super 8	'41	7/8	F	PF	—	2 1/4x1 3/8	.0005	.004	Sep	—
"6"—2000	'42	7/8	F	PF	—	2 3/32x1 1/4	.0005	.004	Sep	A
"8"—2001	'42	7/8	F	PF	—	2 3/32x1 1/4	.0005	.004	Sep	A
"Super 8"—2003,6	'42	7/8	F	PF	—	2 1/4x1 3/8	.0005	.004	Sep	A
2100	'46	7/8	F	PF	—	2 3/32x1 1/4	.0005-.0015	.004-.010	PI	—
2101 & 2111	'46	7/8	F	PF	—	2 3/32x1 1/4	.0005-.0015	.004-.010	PI	—
2103 & 2126	'46	7/8	F	PP	—	2 1/4x1 3/8	.0005-.0015	.004-.010	PI	—
2100 & 2130	'47	7/8	F	PF	—	2 3/32x1 1/4	.0005-.0015	.004-.010	PI	A
2101 & 2111	'47	7/8	F	PF	—	2 3/32x1 1/4	.0005-.0015	.004-.010	PI	A
2103, 2106 & 2126	'47	7/8	F	PP	—	2 1/4x1 3/8	.0005-.0015	.004-.010	PI	A
2201 & 2211	'48	7/8	P	PP	—	2.250x1 5/16	.005-.0025	.004-.010	PI	A
2202 & 2232	'48	7/8	P	PP	—	2.250x1 5/16	.005-.0025	.004-.012	PI	A
2206 & 2233	'48	7/8	P	PP	—	2.250x1 5/16	.005-.0025	.003-.011	PI	A
2301	'49	7/8	P	(p)	—	2.250x1 5/16	.005-.0025	.003-.011	PI	A
2302, 2332	'49	7/8	P	(p)	—	2.250x1 5/16	.005-.0025	.003-.011	PI	A
2306, 2333	'49	7/8	P	(p)	—	2.250x1 5/16	.005-.0025	.003-.011	PI	A
2301	'50	7/8	P	(p)	389646	2.250x1 5/16	.005-.0025	.003-.011	PI	A
2302, 2332	'50	7/8	P	(p)	389646	2.250x1 5/16	.005-.0025	.003-.011	PI	A
2306-2333	'50	7/8	P	(p)	389646	2.250x1 5/16	.005-.0025	.004-.011	PI	A
PLYMOUTH										
Roadking P-11	'41	55/64	F	FP	—	2 1/8x1 7/32	.0005	.0055	Sep	A
De Luxe 6 P 12	'41	55/64	F	FP	—	2 1/8x1 7/32	.0005	.0055	Sep	A
De Luxe P-14	'42	55/64	F	FP	—	2 1/8x1 7/32	.0005	.0055	Sep	A
P-15	'46	55/64	F	FP	—	2 1/8x1 7/32	.001-.0015	.0055-.0115	Sep	A
P-15	'47	55/64	F	TP	—	2 1/8x1 7/32	.0005-.0025	.0055-.0115	PI	A
P-15	'48	55/64	F	TP	—	2 1/8x1 7/32	.0005-.0025	.0055-.0115	PI	A
P-17, P-18	'49	55/64	F	TP	—	2 1/8x1 7/32	.005-.0025	.0055-.0115	PI	A
P-19, P-20	'50	55/64	F	TP	620116	2 1/8x1 7/32	.005-.0025	.0055-.0115	PI	A
PONTIAC										
Fleet & Torpedo 6	'41	15/16	P	.0004	—	2 1/8x1 3/32	.0011	.0095	Sep	A
Sixes	'42	15/16	P	.0004	—	2 1/8x1 9/32	.0011	.0095	Sep	A
Six	'46	.9375	P	PUF	—	2 1/8x1 9/32	.0011	.005-.010	Sep	A
Eight	'46	.9375	P	PUF	—	2x1 1/16	.0011	.005-.010	Sep	A
Six	'47	.9375	P	.0004-.0006	—	2 1/8x1 3/32	.0005-.0015	.005-.010	PI	A
Eight	'47	.9375	P	.0004-.0006	—	2x1 1/16	.0005-.0015	.005-.010	PI	A
Six	'48	.9375	P	.0004-.0006	—	2 1/8x1 9/32	.0005-.0015	.005-.010	PI	A
Eight	'48	.9375	P	.0004-.0006	—	2x1 1/16	.0005-.0015	.005-.010	PI	A
Six 2000,2200,2500	'49	15/16	P	puf	—	2 1/8x1 9/32	.0001-.0021	.007-.012	Sep	A
Eight	'49	15/16	P	puf	—	2x1 1/16	.0001-.0021	.007-.012	Sep	A
6-2900, 2200, 2500	'50	15/16	P	PF	502126	2 1/8x1 9/32	.0001-.00021	.007-.012	Sep	A
Eight-2700	'50	15/16	P	PF	499628	2x1 1/16	.0001-.0021	.007-.012	Sep	A

N.B. Fleet leaders (1941-2-6-7-8) are 20 and 22 Series; Torpedo 6 & 8 (1941-2-6-7-8) are 25 and 27 Series respectively. Streamliner 6 & 8 (1941-2-6-7-8) are 26 and 28 Series respectively: Streamliner 6 & 8 (1948) not distributed in Canada.

PREFECT (English)										
Four Cylinder	'49	.6876-.6879	Lr	.0001-.0003	—	dl	.001-.0025	.004-.010	DB	A
Four Cylinder	'50	.6876-.6879	Lr	PF	—	1.500-1.5005 x1.180-1.182	.001-.003	.004-.010	DB	A

For key to abbreviations see page 37

PISTON PINS AND CONNECTING RODS

Make and Model	Year	Piston Pins—Diameter	Piston Pins—Locking Method	Piston Pins—Clearance (Minimum-Maximum)	Connecting Rod Forging Number	Conn. Rod Bearings—Diameter and Length	Conn. Rod Bearings—Clearance (Min.-Max.)	Conn. Rod Bearings—End Play (Min.-Max.)	Direct Babbitt or Precision Insert	Pistons and Rods removed from above or below
RILEY (English)		PISTON PINS			CONNECTING RODS					
100 hp 2½-Litre	'49	—	F	—						
1½ Litre	'46-'50	19m	Lr	PUF	—	1.875x1.25	.0015	.002-.004	DB	A
2½ Litre	'47-'50	22m	Lr	PUF	—	2.3622x1.375	.0015	.002-.006	DB	A
ROVER (English)										
75	'49	.625	Lr	Ro	—	1.875d	.0015-.002	.009-.013	PI	@
75	'50	.6875	Lr	.0003-.0005 I	212366	1.877-1.178	.001-.002	.009-.013	PI	A
Land Rover	'50	.6875	Lr	.0003-.0005 I	212366	1.878x1.178	.001-.002	.009-.013	PI	A
STUDEBAKER										
Commander 6-11A	'41	⅞	R	.0001	—	2 3/16x1 3/8	.0005	.005	Spun	A
President 8-7C	'41	⅞	R	.0001	—	1 7/8x1 3/16	.0008	.005	Sep	A
Champion 6-3G	'41	¾	R	.0001	—	1 13/16x1 1/8	.0005	.005	Spun	A
Commander 6-12A	'42	⅞	R	.0001	—	2 3/16x1 3/8	.0005	.005	Spun	A
President 8-8C	'42	⅞	R	.0001	—	1 7/8x1 3/16	.0008	.005	Sep	A
Champion 6-4G	'42	¾	R	.0001	—	1 13/16x1 1/8	.0005	.005	Spun	A
Skyway, 5G	'46	¾	R	.0001-.0003	—	1 13/16x1 1/8	.0005	.005	Spun	A
Champion—G6	'47	¾	R	.0001-.0003	—	1 13/16x1 1/8	.0005-.002	.005-.009	PI	A
Comm.—14A	'47	⅞	R	.0001-.0003	—	2 3/16x1 3/8	.0005-.002	.005-.009	PI	A
Champion—7G	'48	¾	R	.0005-.002	—	1.81175-1.81275 x1.123-1.126	.0005-.002	.005-.009	PI	A
Comm.—15A	'48	⅞	R	.0005-.002	—	2.18675-2.18775 x1.373-1.376	.0005-.002	.005-.009	PI	A
Champion-8G	'49	.7491-.7495	R	.0001-.0003	—	1.81175-1.81275 x1.123-1.126	.0005-.002	.005-.009	PI	A
Commander-16A	'49	.8741-.8745	R	.0001-.0003	—	x218675—2.18775 x1.373-1.376				
Champion 9G	'50	.7491-.7495	R	.0001-.0003	517892	1.81175-1.81275 x1.123-1.126	.0005-.002	.005-.009	PI	A
Commander 17A	'50	.8741-.8745	R	.0001-.0003	517924	2.18675-2.18775 x1.373-1.376	.0005-.002	.005-.009	PI	A
SUNBEAM TALBOT (English)										
90	'49	.94	F		—	1.937d	.0005-.002	.002-.004	PI	B
90	'50	.9447-.9449	Lr	ST	—	1.93725-1.93775 x1.091-1.101	.0013-.0015	.0085-.0125	PI	B
TRIUMPH (English)										
Series TRD (1800)	'47-'48	.750	P	—	—	—	—	—	PI	B
Series TRA	'49	⅞	P	—	—	.0002	—	—	PI	A
VANGUARD (English)										
Sedan & Est. Car	'49	⅞	P	—	—	—	—	—	PI	A
Sedan & Est. Car	'50	⅞	P	—	—	—	—	—	PI	A

For key to abbreviations see page 37

PISTON PINS AND CONNECTING RODS

Make and Mode	Year	Piston Pins—Diameter	Piston Pins—Locking Method	Piston Pins—Clearance (Minimum-Maximum)	Connecting Rod Forging Number	Conn. Rod Bearings—Diameter and Length	Conn. Rod Bearings—Clearance (Min.-Max.)	Conn. Rod Bearings—End Play (Min.-Max.)	Direct Babbitt or Precision Insert	Pistons and Rods removed from above or below
VAUXHALL LIP (English)		PISTON PINS			CONNECTING RODS					
Velox	'49	.625	R	SF	—	1.873x1.033	.005-.0025	.007-.012	PI	A
Velox	'50	.625	R	SF	—	1.873x1.033	.005-.0025	.007-.012	PI	A
WILLYS										
Willys Americar	'41	13/16	R	.0001-.0009	—	1 15/16 x 1 5/16	.0008	.005	Spun	A
Willys Americar	'42	13/16	R	.0003	—	1 15/16 x 1 5/16	.0008	.005	Spun	A
CJ 2A Univ. Jeep	'45	.8177	R	.0003	—	1 15/16 x 1 5/16	.0015	.007	Sep	A
CJ-2A Univ. Jeep	'47	.8117-.8119	R	.0001-.0005	—	1 15/16 x 1 5/16	.0005-.0025	.005-.009	PI	A
CJ-2A, 2WD, 4WD	'48	.8118	R	FP	—	1.940x1 3/32	.0005-.0025	.004-.010	PI	A
6-63	'48	.7498	R	FP	—	1.876x7/8	.0005-.0025	.004-.010	PI	A
All Four Cyl. models	'49	.8118	R	FP	—	1 15/16 x 1 5/16	.0005-.0025	.005-.009	PI	B
6-63	'49	.7498	R	FP	—	1.875x.899	.0004-.0025	.004-.010	PI	B
4-73 Sta. Wgn.	'50	.8117-.8119	R	PP	641770	1.9375-1.3125	.0002-.0025	.004-.010	PI	A
4x4-63 Sta. Wgn.	'50	.8118	R	—	641770	—	—	—	—	—
6-73 Sta. Wgn.	'50	3/4	R	PP	641770	1 7/8 x 1 1/8	.0001-.0025	.002-.008	PI	A
4-73 VJ Jeepster	'50	.8117-.8119	R	PP	—	1.9375-1.3125	.0002-.0025	.004-.010	PI	A
6-73 VJ Jeepster	'50	3/4	R	PP	—	1 7/8 x 1 1/8	.0001-.0025	.002-.008	PI	A
WOLSELEY (English)										
Four-Fifty	'49	.75	—	—						
Six-Eighty	'49	.75	—	—						
Six-Eighty	'50	.75	CB	PUF	—	2.0x1.25	.001-.003	.0035-.0065	PI	A
Four-Fifty	'50	.75	CB	PUF	—	2.0x1.25	.001-.003	.0035-.0065	PI	A

ABBREVIATIONS

a—Outside diameter 2.218; inside length 1.748.
@—Piston removed from above, rod below by removing piston pin.
b—outside diameter 2.358; inside 2.139.
B—From below.
C—.0003-.0004 clearance in piston, .0001-.0005 clearance in rod.
CB—Clamp bolt.
d—Diameter.
DB—Direct babbitt.
f—At 70°F.
(f)—Plus .0002.
F—Floating.
FP—Finger push.
H—Fit in piston 0-.003; in rod push fit.
I—Ensure fully floating fit.
J—Palm push fit at 68°F., thumb push fit in rod.
j—Fit in rod palm push fit at 120°F.
Lr—Lockring.
m—Millimeters.
(m)—Plus or minus .0002.
M—Maximum.
o—Piston .0096.
pc—.0003 tight; .0003 loose.
pf—Fit in piston .0000-.0003 at 70°F. Fit in rod PUF at 70°F.
pp—Palm drive fit in piston at 70°F.
(p)—In piston—palm push; in rod—finger push.
(pc)—.0001 tight; .0003 loose.
P—Locked in piston.
PF—Push fit at room temperature. 80-130 pounds per square inch.
PI—Precision insert.
PP—Palm push at 160°F. in water.
PUF—Push fit.
(P)—Push fit in boiling oil.
r—Rod .0003.
R—Locked in rod.
Ro—Connecting rod .0003-.0005; piston .0002 clearance to .0003 interference.
S—Selective fit.
SB—Spun babbitt.
Sep—Separate.
SF—Slip fit.
ST—In rod .0001-.0002, interference in piston .0002-.0006.
TP—Thumb push in piston at 130°F.; in rod at 70°F.
tp—Thumb push in piston at 70°F; in rod at 70°F.
x—.0005-.0001 loose (assemble with piston at 175°F.-210°F.).
y—Push fit at 212°F.
yy—.00005-.0001 at 70°F.
∅—Clearance between pin and bushing in rod.

PISTONS AND PISTON RINGS

Make and Model	Year	Piston Clearance—Top (Minimum-Maximum)	Piston Clearance—Bottom (Minimum-Maximum)	Piston Ring Groove Depth—Oil (After 1949—Piston Ring Width)	Piston Ring Groove Depth—Compression (After 1949—Piston Ring Depth)	Cylinder Bore—Inches	No. Oil Rings Used	Oil Ring Gap (Minimum-Maximum)	No. Compression Rings Used	Compression Ring Gap (Minimum-Maximum)
ANGLIA (English)		PISTONS		PISTON RINGS						
Four Cylinder	'49	A	—	.156-.157	T	2.5	1	.004-.007	2	.004-.007
Four Cylinder	'50	—	A	.1545	—	2.5	1	.004-.007	2	.004-.007
AUSTIN (English)										
A.40	'48	—	—	—	—	2.578	1	.004-.011	2	.004-.011
A-40 Devon & Dorset	'49	.011-.015	.0015	—	—	2.578	1	.006-.011	2	.006-.011
A-40 Dev. & Dor.	'50	.011-.015	.0015-.0025	.1577-.1585	.095-.0955	2.578	1	.006-.011	2	.006-.011
BUICK										
Spec. 44, Super 45	'41	.023	.0018	.166	.166	3 3/32	2	.010	2	.015U-.012L
Series 46, 47, 49	'41	.026	.0020	.182	.182	3 7/16	2	.010	2	.015U-.012L
Series 44	'42	.023	.0018	.166	.166	3 3/32	2	.010	2	.015U-.012L
Series 46	'42	.026	.0020	.182	.182	3 7/16	2	.010	2	.015U-.012L
Series 50	'46	†	†	.166	.166	3 3/32	2	.015	2	.015
Series 70	'46	†	†	.182	.182	3 7/16	2	.015	2	.015
Series 40	'47	†	†	.167	.167	3 3/32	2	.010-.020	2	.010-.020
Series 50	'47	†	†	.167	.167	3 3/32	2	.010-.020	2	.010-.020
Series 70	'47	†	†	.182	.182	3 7/16	2	.010-.020	2	.010-.020
Series 40, 50, 70	'48	(Not distributed in Canada)								
Series 40, 50, 70	'49	(Not distributed in Canada)								
Series 40, 50 70	'50	(Not distributed in Canada)								
CADILLAC										
All Series	'41	.0196	.0017	.160	.181U-.151L	3 1/2	2	.007	2	.007
All Series	'42	.0196	.0017	160	.181U-.151L	3 1/2	2	.007	2	.007
V-8	'46	.0021	.0005	—	—	3 1/2	1	.015	2	.015
V-8	'47	.0023-.0025‡	.0005	—	—	3 1/2	1	.007-.023	2	.007-.023
V-8	'48	(Not distributed in Canada)								
V-8	'49	(Not distributed in Canada)								
V-8	'50	(Not distributed in Canada)								
CHEVROLET										
Six	'41	.0145	.0015	.172	.151	3 1/2	1	.005	2	.005
Six	'42	.0145	.0015	.172	.151	3 1/2	1	.005	2	.005
Six	'46	.0195	—	.176	.156	3 1/2	1	.010	2	.010
Six	'47	P	P	.170-.183	.1490-.1645	3 1/2	1	.005-.015	2	.005-.015
Six	'48	P	P	.186-.191	.167-.172	3 1/2	1	.005-.015	2	.005-.015
Six	'49	.0155-.0235	P	.170-.183	.1490-.1645	3 1/2	1	.005-.015	2	.005-.015
Six	'50	.0155-.0235	P	.1860- 1865	.1490-.1645	3 1/2	1	.005-.015	2	.005-.015
CHRYSLER										
Royal 6 C-28	'41	.028	.0001	.175	.179U-.154I	3 3/8	2	.007	2	.007
New Yorker 8 C-30	'41	.022	.0001	.177	.157	3 1/4	2	.007	2	.007
Crown Imp. C-33	'41	.022	.0001	.177	.157	3 1/4	2	.007	2	.007
Royal 6 C-34	'42	.028	.0005	.174	.179	3 5/16	2	.007	2	.007
New Yorker 8 C-36	'42	.022	.0001	.174	.179	3 1/4	2	.007	2	.007
Crown Imp. C-37	'42	.022	.0001	.174	.179	3 1/4	2	.007	2	.007
C-38W, C-38S	'46	.0305	.0010	.175	.1765	3 5/16	2	.007-.015	2	.007-.015
Six C-38W, C-38S	'47	.023	s	.178	.1765	3 7/16	2	.007-.015	2	.007-.015

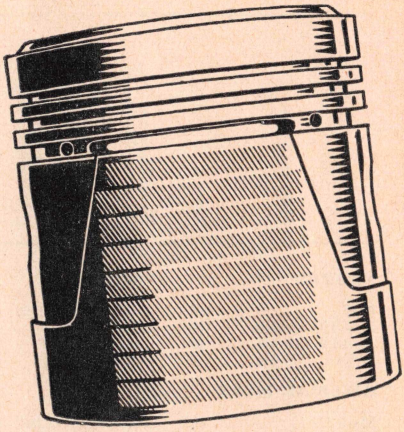
For key to abbreviations see page 47

PISTONS AND PISTON RINGS

Make and Model	Year	Piston Clearance—Top (Minimum-Maximum)	Piston Clearance—Bottom (Minimum-Maximum)	Piston Ring Groove Depth—Oil (After 1949) Piston Ring Width)	Piston Ring Groove Depth—Compression (After 1949) Piston Ring Depth)	Cylinder Bore—Inches	No. Oil Rings Used	Oil Ring Gap (Minimum-Maximum)	No. Compression Rings Used	Compression Ring Gap (Minimum-Maximum)
CHRYSLER—(Continued)		PISTONS		PISTON RINGS						
Eight C-39, C-40	'47	.0305	S-1	.172	.169	3 1/4	2	.007-.015	2	.007-.015
Six C-38W, C-38S	'48	.023	s	.178	.1765	3 7/16	2	.007-.015	2	.007-.015
Eight C-39, C-40	'48	.0305	S-1	.172	.169	3 1/4	2	.007-.015	2	.007-.015
Six - C45	'49	.023	s	.178	.1765	3 7/16	2	.007-.015	2	.007-.015
Eight C46, C47	'49	.0305	s-1	.172	.169	3 1/4	2	.007-.015	2	.007-.015
Six	'50	.023	s	3/32	—	3 7/16	2	.007-.015	2	.007-.015
Eight	'50	.0305	s-1	3/32	—	3 1/4	2	.007-.015	2	.007-.015
CROSLEY										
CC (Up to 41547)	'47	.015-.018	.0025-.0035	.128-.135	.128-.135	2.5	2	.007-.015	2	.007-.015
CC, CD (to 106039)	'48	.015-.018	.0025-.0035	.128-.135	.128-.135	2.5	2	.007-.015	2	.007-.015
CD (After 106039)	'49	.015-.018	.0025-.0035	.128-.135	.128-.135	2.5	2	.007-.015	2	.007-.015
Crosley	'50	.0025-.0035	.0025-.0035	.117C	.1545-.155C	2 1/2	2	.007-.015	2	.007-.017
DE SOTO										
Six S-8	'41	.028	.0005	.175	.179U-.1541	3 3/8	2	.007	2	.007
Six S-10	'42	.028	.0005	.174	.179	3 7/16	2	007	2	.007
S-11	'46	.0305	.0010	.178	.1765	3 7/16	2	.007-.015	2	.007-.015
S-11	'47	.023	s	.178	.1765	3 7/16	2	.007-.015	2	.007-.015
S-11	'48	.023	s	.178	.1765	3 7/16	2	.007-.015	2	.007-.015
S-13 Custom	'49	.023	s	.178	.1765	3 7/16	2	.007-.015	2	.007-.015
S14	'50	.023	S	3/32	—	3 7/16	2	.007-.015	2	.007-.015
DODGE										
Kingsway 6 D-20	'41	.028	.0005	.175	.179U-.1541	3 3/8	2	.007	2	.007
De Luxe 6 D-21	'41	.028	.0005	.175	.179U-.1541	3 3/8	2	.007	2	.007
Luxury Liner D-19	'41	.028	.0005	.175	.179U-.1541	3 3/8	2	.007	2	.007
De Luxe D-23	'42	.028	.0005	.175	.179U-.1541	3 3/8	2	.007	2	.007
Custom D-22	'42	.028	.0005	.174	179	3 3/8	2	.007	2	.007
D-25	'46	.023	.0010	.1763	.1763	3 3/8	2	.007-.015	2	.007-.015
D-24	'46	.023	.0010	.1763	.1763	3 3/8	2	.007-.015	2	.007-.015
D-25	'47	.023	s	.1763	.1763	3 3/8	2	.007-.015	2	.007-.015
D-24	'47	.023	s	.1763	.1763	3 3/8	2	.007-.015	2	.007-.015
D-25	'48	.023	s	.1763	.1763	3 3/8	2	.007-.015	2	.007-.015
D-24	'48	.023	s	.1763	.1763	3 3/8	2	.007-.015	2	.007-.015
D-30	'49	.023	s	.1763	.1763	3 3/8	2	.007-.015	2	.007-.015
D-31, D-32	'49	.023	s	.1763	.1763	3 3/8	2	.007-.015	2	.007-.015
D34-D35-D36	'50	.023	S	3/32	—	3 3/8	2	.007-.015	2	.007-.015
FORD										
V-8 85	'41	.001	.0003	.148	.141	3 1/16	1	.008-.013	2	.008-.013
V-8 85	'42	.001	.0003	.148	.141	3 1/16	1	.008-.013	2	.008-.013
De Luxe	'46	.032	.0020	.145-.151	.137-.144	3 1/16	2	.008	2	.005
Super De Luxe	'46	.032	.0020	.145-.151	.137-.144	3 1/16	2	.008	2	.005
De Luxe & Super De L.	'47	.032	.002	.164-.170	.158-.164	3 9/16	2	.005M	2	.005M
De Luxe & Super De L.	'48	.032	.002	.164-.170	.158-.164	3 9/16	2	.005M	2	.005M
V-8	'49	.0025(F)	.0025(F)	.179-.184	—	3.1875	2	.005-.015	2	.005-.012
V-8	'50	.032	.002	.1860-.1865	.137-.147	3 9/16	2	.007-.017	2	.007-.017

For key to abbreviations see page 47

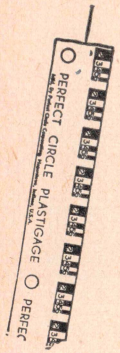
NURLIZER



Sizes Pistons Quickly —Permanently!

By permanently displacing metal in the grooved patterns as shown, NURLIZING increases the crosshead diameter of the piston. At the same time, it gives the piston an interrupted surface that assures better lubrication, permits closer fit without danger of scuffing or scoring. Size is accurately, easily, predetermined!

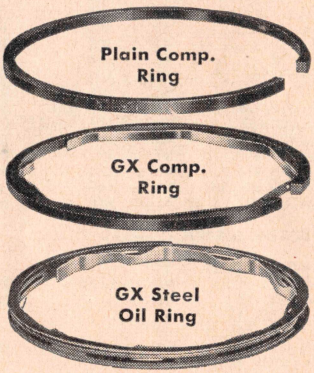
New life for old pistons—longer life for new pistons!



PLASTIGAGE

Saves Time and Labor!

Bearing clearances SHOULD be checked on EVERY engine overhaul, if the job is to give complete satisfaction. PLASTIGAGE saves as much as 2/3 the time used by older methods. Labor time saved — cost goes down!



CUSTOM MADE PISTON RING SETS

Custom Made Sets, backed by years of experience, are chosen by the experts—engineers, expert mechanics, and the car-driving public. Regardless of engine make, model, age, or type of service, there is a PERFECT CIRCLE Set *Custom Made* for that engine — guaranteed to stop oil pumping, step up power, save gas.

PERFECT CIRCLE

The Most Honored Name in Piston Rings

PISTONS AND PISTON RINGS

Make and Model	Year	Piston Clearance—Top (Minimum-Maximum)	Piston Clearance—Bottom (Minimum-Maximum)	Piston Ring Groove Depth—Oil (After 1949—Piston Ring Width)	Piston Ring Groove Depth—Compression (After 1949—Piston Ring Depth)	Cylinder Bore—Inches	No. Oil Rings Used	Oil Ring Gap (Minimum-Maximum)	No. Compression Rings Used	Compression Ring Gap (Minimum-Maximum)
FRAZER		PISTONS		PISTON RINGS						
F-47	'47	.0255-.0315	.008	.1755-.1825	.1745-.1810	3 5/16	2	.008-.016	2	.008-.016
F-47-47C-485-486	'48	.0255-.0315	f	.1755-.1825	.1745-.1810	3 5/16	2	.008-.016	2	.008-.016
Series F-495, 496	'49	.0255-.0315	f	.1755-.1825	.1745-.1810	3 5/16	2	.008-.016	2	.008-.016
Series F-495, 496	'50	.0255-.0315	f	.1755-.1825	.1745-.1810	3 5/16	2	.008-.016	2	.008-.016
HILLMAN MINX (English)										
Mark III	'49	.002-.0025	.002-.0025	—	—	2.47	1	.006-.010	2	.006-.010
Mark IV	'50	—	.0019-.0027	.1565-.1575	—	2.56	1	.006-.010	2	.006-.010
HUDSON										
Six	'41	.016	.0005	.1485	.1485	3	2	.009	2	.009
Eight	'41	.016	.0005	.1485	.1485	3	2	.009	2	.009
Sixes	'42	.016	.0005	.1485	.1485	3	2	.009	2	.009
Eights	'42	.016	.0005	.1485	.1485	3	2	.009	2	.009
Six-51, 52	'46	.016	.0008	.1480	.1480	3	2	.010	2	.010
Eight-53, 54	'46	.016	.0008	.1480	.1480	3	2	.010	2	.010
Six-171, 172	'47	.016-.020	.0008	.14625	.14625	3	2	.009-.011	2	.009-.011
Eight-173, 174	'47	.016-.020	.0008	.14625	.14625	3	2	.009-.011	2	.009-.011
Series 481, 482	'48	.00125-.00225	.0005-.001	.195	.195	3 9/16	2	.007-.012	2	.007-.012
Series 483, 484	'48	.001-.0015	.0005-.001	.148	.148	3	2	.004-.009	2	.004-.009
Series 491, 492	'49	.017	.0005-.001	.195	.195	3 9/16	2	.007-.012	2	.007-.012
Series 493, 494	'49	.016	.0005-.001	.148	.148	3	2	.004-.009	2	.004-.009
Series 500, 501, 502	'50	.017	.0005-.001	.195	.195	3 9/16	2	.007-.012	2	.007-.012
Series 503, 504	'50	.016	.0005-.001	.148	.148	3	2	.004-.009	2	.004-.009
HUMBER HAWK (English)										
Super Snipe Mk. II	'48	—	—	.1865-.1875	—	3.35	2	.010-.016	2	.010-.014
Mark III	'49	.0025	.0025	.1875-.1865w	.0938-.0933w	2.95	1	.010	2	.010
Hawk Mk. III	'49	—	.003-.004	.1865-.1875	—	2.95	1	.010-.014	2	.010-.014
Pullman Mk. II	'49	—	—	.1865-.1875	—	3.35	2	.010-.016	2	.010-.016
Super Snipe Mk. II	'49	—	—	.1865-.1875	—	3.35	2	.010-.016	2	.010-.014
Hawk Mk. III	'50	—	.003-.004	.1865-.1875	—	2.95	1	.010-.014	2	.010-.014
Pullman Mk. II	'50	—	—	.1865-.1875	—	3.35	2	.010-.016	2	.010-.016
Super Snipe Mk. II	'50	—	—	.1865-.1875	—	3.35	2	.010-.016	2	.010-.014
JAGUAR (English)										
1½ Litre. Sal.	'46-'48	.0028-.0034	.0013-.0019	—	—	2.7840	1	.003-.007	2	.003-.007
2½ Litre. S&C	'46-'48	.0028-.0034	.0013-.0019	—	—	2.7840	1	.003-.007	2	.003-.007
3½ Litre. S&C	'46-'48	.0031-.0037	.0018-.0024	—	—	3.2283	1	.003-.007	2	.003-.007
2½ Ltre. S&C Mk.V	'49	.0028-.0034	.0018-.0024	—	—	2.7840	1	.003-.007	2	.003-.007
3½ Ltre. S&C MkV	'49	.0031-.0037	.0018-.0024	—	—	3.2283	1	.003-.007	2	.003-.007
3½ Ltre. XK. 120	'49	.0033-.004	.0018-.0025	—	—	3.2677	1	.006-.010	2	.006-.010
KAISER										
K-100	'47	.0255-.0315	.008	.1755-.1825	.1745-.1810	3 5/16	2	.008-.016	2	.008-.016
K-100-101-481-482	'48	.0255-.0315	f	.1755-.1825	.1745-.1810	3 5/16	2	.008-.016	2	.008-.016
Series K-492, 491	'49	.0255-.0315	f	.1755-.1825	.1745-.1810	3 5/16	2	.008-.016	2	.008-.016
K-492, 491	'50	.0255-.0315	f	.1755-.1825	.1745-.1810	3 5/16	2	.008-.016	2	.008-.016

For key to abbreviations see page 47

PISTONS AND PISTON RINGS

Make and Model	Year	Piston Clearance—Top (Minimum-Maximum)	Piston Clearance—Bottom (Minimum-Maximum)	Piston Ring Groove Depth—Oil (After 1949—Piston Ring Width)	Piston Ring Groove Depth—Compression (After 1949—Piston Ring Depth)	Cylinder Bore—Inches	No. Oil Rings Used	Oil Ring Gap (Minimum-Maximum)	No. Compression Rings Used	Compression Ring Gap (Minimum-Maximum)
LINCOLN		PISTONS		PISTON RINGS						
Lincoln, Linc. Cont.	'41	003	.0020							
Lincoln, Linc. Cont.	'47	.012	.002	.151U-.159L	.159	2⅞	1	.008-.013	2	.008-.013
Lincoln, Linc. Cont.	'48	.012	.002	.164	.153U-.1645L	2⅞	1	.008-.013	2	.012-.017
Lincoln, Linc. Cont.	'49	(Not distributed in Canada)		.164	.153U-.1645L	2⅞	1	.008-.013	2	.012-.017
Linc. & Linc. Cont.	'50	(Not distributed in Canada)								
MERCURY										
Mercury	'41	.001	.0003	.167	.161	3 5/16	1	.009-.014	2	.009-.014
Mercury	'42	.001	.0003	.161	.161	3 5/16	1	.009-.014	2	.009-.014
114 & 114X	'46	.032	.002	.145-.151	.137-.144	3 1/16	2	.008	2	.005
118	'46	.032	.002	.164-.170	.158-.164	3 5/16	2	.008	2	.005
114, 114X & 118	'47	.032	.002	.164-.170	.158-.164	3 5/16	2	.005M	2	.005M
114, 114X & 118	'48	.032	.002	.164-.170	.158-.164	3 5/16	2	.005M	2	.005M
Mercury	'49	.0015b	.0015b	(b)	.166-.173	3.1875	2	.010-.017	2	.010-.017
Mercury	'50	.032	.002	.1850-.1865	—	3 5/16	2	.010-.017	2	.010-.017
METEOR										
Meteor	'49	.0025(F)	.0025(F)	.179-.184	.165-.168	3.1875	2	.005-.015	2	.005-.012
Meteor	'50	.032	.002	.1860-.1865	.137-.147	3 5/16	2	.007-.017	2	.007-.017
MG (English)										
T.C.	'48	.0025	.0015	—	—	2.6181	1	.004-.006	2	.004-.006
Series Y	'49	.0022-.0028	.0005	—	—	2.6181	1	.006-.010	2	.006-.010
Series TD	'50	.0025	.002	.1575c	.095-.105	2.618	1	.006-.010	2	.006-.010
Series Y	'50	.0025	.002	.1575c	.095-.105	2.618	1	.006-.010	2	.006-.010
MONARCH										
Monarch	'46	.032	.002	.164-.170	.158-.164	3 5/16	2	.008	2	.005
Monarch	'47	.032	.002	.164-.170	.158-.164	3 5/16	2	.005M	2	.005M
Monarch	'48	.032	.002	.164-.170	.158-.164	3 5/16	2	.005M	2	.005M
Monarch	'49	.0015b	.0015b	(b)	.166-.173	3.1875	2	.010-.017	2	.010-.017
V-8	'50	.032	.002	.1860-.1865	—	3 5/16	2	.010-.017	2	.010-.017
MORRIS (English)										
8 Series E	'48	.0024	.002	—	—	2.244	1	.0025-.0065	2	.0025-.0065
10 Series M	'48	.012	.003	—	—	2.5	2	.003-.006	2	.003-.006
Minor	'48	.002	.002	2.96	—	2.244	1	.0025-.0065	2	.0025-.0065
Oxford	'48	.002-.003	.0008	.156	.111	2.8937	1	.0085-.0125	2	.0085-.0125
Minor	'49	.002	.002	2.96	—	2.244	1	.0025-.065	2	.0025-.0065
Oxford	'49	.002-.003	.0008	.156	.111	2.8937	1	.0085-.0125	2	.0085-.0125
Six	'49	.0002-.0008	—	.156	.111	2.894	1	.0085-.0125	2	.0085-.0125
Minor	'50	.002	.002	2.96	—	2.244	1	.0025-.0065	2	.0025-.0065
Oxford	'50	.002-.003	.0008	.156	.111	2.8937	1	.0085-.0125	2	.0085-.0125
Six	'50	.0002-.0008	—	.156	.111	2.894	1	.0085-.0125	2	.0085-.0125
NASH										
Ambassador 600	'41	.017	.0010	.175	.155	3 1/8	1	.010	2	.010
Ambassador 6	'41	.020	.0010	.175	.155	3 3/8	2	.010	2	.010
Ambassador 8	'41	.018	.0010	.175	.155	3 1/8	2	.010	2	.010

For key to abbreviations see page 47 *(Continued on page 44)*

PISTONS AND PISTON RINGS

Make and Model	Year	Piston Clearance—Top (Minimum-Maximum)	Piston Clearance—Bottom (Minimum-Maximum)	Piston Ring Groove Depth—Oil (After 1949—Piston Ring Width)	Piston Ring Groove Depth—Compression (After 1949—Piston Ring Depth)	Cylinder Bore—Inches	No. Oil Rings Used	Oil Ring Gap (Minimum-Maximum)	No. Compression Rings Used	Compression Ring Gap (Minimum-Maximum)
NASH—(Continued)		PISTONS				PISTON RINGS				
4240—"6"	'42	.017	.0010	.175	.155	3 1/8	1	.010	2	.010
4260—"6"	'42	.020	.0010	.175	.155	3 3/8	2	.018	2	.020
4280—"8"	'42	.018	.0010	.175	.155	3 1/8	2	.010	2	.020
Series 4640	'46	.015	.0010	.174	(a)	3 1/8	1	.020	2	.015
Series 4660	'46	—	.0010	.175	.155	3 3/8	2	.015	2	.015
Series 4740	'47	S	S	.174	(a)	3 1/8	1	.010-.020	2	.010-.020
Series 4760	'47	S	S	.175	.155	3 3/8	2	.010-.015	2	.010-.015
Series 4840	'48	—	.0015	5/32	5/32	3 1/8	1	.012-.015	2	.012-.015
Series 4860	'48	—	.002	5/32	5/32	3 3/8	2	.012-.015	2	.012-.015
Series 4940	'49	—	—	.174	#1 .170 #2 .154	3 1/8	2	.010-.015	2	.010-.015
Series 4960	'49	.0188	—	.177	#1 .180 #2 .157	3 3/8	2	.010-.015	2	.010-.015
Canadian Statesman	'50	.004	.004	5/32	5/32	3 1/8	2	.010-.015	2	.010-.015
Statesman (U.S.)	'50	.004	.004	5/32	5/32	3 1/8	2	.010-.015	2	.010-.015
Ambassador (U.S.)	'50	.004	.004	5/32	5/32	3 1/8	2	.010-.015	2	.010-.015
Rambler (U.S.)	'50	.004	.004	5/32	5/32	3 1/8	2	.010-.015	2	.010-.015
OLDSMOBILE										
Six	'41	.026	.0007	.171	.187	3 1/2	2	.007	2	.008
Eight	'41	.023	.0013	11/64	5/32	3 1/4	2	.009	2	.009
Six	'42	.026	.0007	.171	.187	3 1/2	2	.007	2	.008
Eight	'42	.023	.0013	11/64	5/32	3 1/4	2	.009	2	.009
Six	'46	.0255	.0007	.171	.187	3 1/2	2	.011	2	.013
Eight	'46	.0255	.0015	.171	.171	3 1/4	2	.011	2	.011
Six	'47	.0005-.001*	.0005-.001°	.173-.177	.181-.184	3 1/2	2	.009-.014	2	.008-.015
Eight	'47	.0013-.0018°	.0013-.0018°	.162-.170	.158-.164	3 1/4	2	.009-.014	2	.009-.014
Six	'48	.0005-.001	.0005-.001	.173-.177	.181-.184	3 1/2	2	.009-.014	2	.008-.015
Eight	'48	.0013-.0018	.0013-.0018	.162-.170	.158-.164	3 1/4	2	.009-.014	2	.009-.014
Six	'49	.023-.028	.00075	.175	.183	3 17/32	2	.007-.015	2	.007-.017
Eight	'49	.032-.036	.0005-.0010	.193	.200	3 3/4	1	.008-.016	2	.008-.016
Eight ("88")	'50	.032-.026	.0005-.0010	3/16	.175	3 3/4	1	.008-.016	2	.010-.020
Six ("76")	'50	.023-.028	.0005-.0010	3/16	—	3 17/32	2	.007-.15	2	.008-.018
PACKARD										
110	'41	—	.0005	.182	.188U-.184L	3 1/2	1	.007	2	.007
120	'41	—	.0005	.176	.178	3 1/4	1	.007	2	.007
Super 8	'41	—	.0005	.182	.188U-.184L	3 1/2	1	.007	2	.007
"6"—2000	'42	—	.0013	.188	.1867U-.1617L	3 1/2	1	.007	2	.007
"8"—2001	'42	—	.0013	.182	.1735U-.1565L	3 1/4	1	.007	2	.007
"Super 8"—2003, 6	'42	—	.0005	.182	.188U-.184L	3 1/2	1	.007	2	.007
2100	'46	—	.0005-.001	—	—	3 1/2	1	.007-.015	2	.007-.017
2101 & 2111	'46	—	.0005-.001	—	—	3 1/4	1	.007-.015	2	.007-.017
2103 & 2126	'46	—	.0005-.001	—	—	3 1/2	1	.007-.015	2	.007-.017
2100 & 2130	'47	—	.0005-.001	—	—	3 1/2	1	.007-.015	2	.007-.017
2101 & 2111	'47	—	.0005-.001	—	—	3 1/4	1	.007-.015	2	.007-.017
2103, 2106 & 2126	'47	—	.0005-.001	—	—	3 1/2	1	.007-.015	2	.007-.017
2201, 2211	'48	—	.0005-.001	—	—	3 1/2	1	.007-.015	2	.007-.017
2202, 2232	'48	—	.0005-.001	—	—	3 1/2	1	.007-.015	2	.007-.017
2206-2233	'48	—	.0005-.001	—	—	3 1/2	1	.007-.015	2	.007-.017
2301	'49	—	.0005-.001	—	—	3 1/2	1	.0054-.02132		.0054-.0233
2302, 2332	'49	—	.0005-.001	—	—	3 1/2	1	.0054-.02132		.0054-.0233
2306, 2333	'49	—	.0005-.001	—	—	3 1/2	1	.0054-.02132		.0054-.0233
2301	'50	—	.0005-.001	—	—	3 1/2	1	.0054-.02132		.0054-.0233
2302, 2332	'50	—	.0005-.001	—	—	3 1/2	1	.0054-.02132		.0054-.0233
2306, 2333	'50	—	.0005-.001	—	—	3 1/2	1	.0054-.02132		.0054-.0233

For key to abbreviations see page 47

PISTONS AND PISTON RINGS

Make and Model	Year	Piston Clearance—Top (Minimum-Maximum)	Piston Clearance—Bottom (Minimum-Maximum)	Piston Ring Groove Depth—Oil (After 1949—Piston Ring Width)	Piston Ring Groove Depth—Compression (After 1949—Piston Ring Depth)	Cylinder Bore—Inches	No. Oil Rings Used	Oil Ring Gap (Minimum-Maximum)	No. Compression Rings Used	Compression Ring Gap (Minimum-Maximum)
PLYMOUTH		PISTON		PISTON RINGS						
Roadking P-11	'41	.028	.0005	.175	.179U-.1541	3 3/8	2	.007	2	.007
De Luxe 6 P-12	'41	.028	.0005	.175	.179U-.1541	3 3/8	2	.007	2	.007
De Luxe P-14	'42	.028	.0005	.174	.179	3 3/8	2	.007	2	.007
P-15	'46	.023	.0010	.1763	.1763	3 3/8	2	.007-.015	2	.007-.015
P-15	'47	.023	s	.1763	.1763	3 3/8	2	.007-.015	2	.007-.015
P-15	'48	.023	s	.1763	1763	3 3/8	2	.007-.015	2	.007-.015
P-17, P-18	'49	.023	s	.1763	1763	3 3/8	2	.007-.015	2	.007-.015
P-19, P-20	'50	.023	s	3/32	—	3 3/8	2	.007-.015	2	.007-.015
PONTIAC										
Fleetleader	'41	.0235	.0020	.193	.187	3 3/16	1	.010	2	.010
Torpedo 6	'41	.0235	.0020	.193	.187	3 3/16	1	.012	2	.012
Fleetleader 6	'42	.0235	.0020	.193	.187	3 3/16	1	.010	2	.010
Torpedo 6 & De Luxe	'42	.0235	.0020	.193	.187	3 3/16	1	.012	2	.012
Six	'46	.0235	.0020	.194	.192	3 3/16	1	.012	2	.009
Eight	'46	.0225	.0020	.189	.169	3 1/4	1	.009	2	.011
Six	'47	@	@	.191-.197	.176-.186	3 3/16	1	.009-.014	2	.007-.012
Eight	'47	@	@	.185-.191	.152-.162	3 1/4	1	.007-.017	2	.007-.012
Six	'48	@	@	.191-.197	.176-.186	3 3/16	1	.009-.014	2	.007-.012
Eight	'48	@	@	.185-.191	.152-.162	3 1/4	1	.007-.017	2	.007-.012
Six 2000, 2200, 2500	'49	.0175-.0295	@	.1942	.1922	3 9/16	1	.006-.013	2	.006-.013
Eight	'49	.0165-.0284	@	.189	.169	3 1/4	1	.008-.015	2	.008-.015
Six-2000, 2200, 2500	'50	.0155-.0275	—	—	—	3 3/16	1	.006-.013	2	.006-.013
Eight-2700	'50	.015-.027	—	—	—	3 3/8	1	.008-.0015	2	.008-.015

N.B. Fleetleaders (1941-2-6-7-7) are 20 and 22 Series; Torpedo 6 & 8 (1941-2-6-7-7) are 25 and 27 Series respectively.
Streamliner 6 & 8 (1941-2-6-7-8) are 26 and 28 Series respectively; Streamliner 6 & 8 (1948) not distributed in Canada.

PREFECT (English)										
Four Cylinder	'49	A	—	.156-.157	T	2.5	1	.004-.007	2	.004-.007
Four Cylinder	'50	—	.0015A	.1545	.076	2.50	1	.004-.007	2	.004-.007
RILEY (English)										
100 hp 2½-Litre	'49	.0175	.003	—	—	80.5m	2	.008	2	.008
1½ Litre	'46-'50	.003-.004	.002-.003	5/32	—	2.716	1	.008	3	.008
2½ Litre	'47-'50	.004	.0035	4m	—	3.169	2	.008-.012	2	.008-.012
ROVER (English)										
75	'49	—	.0015∅	.156	.070	2.567	2	.008-.012	2	.008-.012
75	'50	.0015-.002	.0015-.002	—	—	2.567	2	.011-.015	2	.014-.018
Land Rover	'50	.0015-.002	.0015-.002	—	—	2.736	2	.011-.015	2	.014-.018
STUDEBAKER										
Commander 6-11A	'41	.013	.0015	.183	.168	3 5/16	1	.009	2	.009
President 8-7C	'41	.012	.0015	.166	.146	3 1/16	1	.013	2	.013
Champion 6-3G	'41	.014	.0015	.165	.160	3	1	.007	2	.007
Commander 6-12A	'42	.006-.009	.0015	.183	.168	3 5/16	1	.009	2	.009
President 8-8C	'42	.066-.009	.0015	.166	.146	3 1/16	1	.013	2	.013

(Continued on page 46

For key to abbreviations see page 47

PISTONS AND PISTON RINGS

Make and Model	Year	Piston Clearance—Top (Minimum-Maximum)	Piston Clearance—Bottom (Minimum-Maximum)	Piston Ring Groove Depth—Oil (After 1949—Piston Ring Width)	Piston Ring Groove Depth—Compression (After 1949—Piston Ring Depth)	Cylinder Bore—Inches	No. Oil Rings Used	Oil Ring Gap (Minimum-Maximum)	No. Compression Rings Used	Compression Ring Gap (Minimum-Maximum)
STUDEBAKER—(Continued)		**PISTONS**				**PISTON RINGS**				
Champion 6-4G	'42	.006-.009	.0015	.165	.160	3	1	.007	2	.007
Skyway 5G	'46	.006-.009	.0015	.165	.160	3	1	.007	2	.007
Champion 6-G	'47	.014-.019	S	.168	.148	3	1	.007-.017	2	.007-.017
Commander 14-A	'47	.0125-.0175	S	.182	.167	3 5/16	1	.009-.014	2	.009-.014
Champion 7-G	'48	.014-.019	S	.165-.172	.145-.152	3	1	.007-.017	2	.007-.017
Commander 15-A	'48	.0125-.0175	S	.1825-.189	.1675-.174	3 5/16	1	.009-.014	2	.009-.014
Champion - 8-G	'49	.014-.019	(s)	.165-.172	.145-.152	3	1	.007-.017	2	.007-.017
Commander - 16-A	'49	.0125-.0175	(S)	.1875-.189	.1675-.174	3 5/16	1	.009-.014	2	.009-.014
Champion 9G	'50	(s)	—	5/32	—	3	1	.007-.017	2	.007-.017
Commander 17A	'50	(S)	—	—	—	—	1	.009-.014	2	.009-.014
SUNBEAM TALBOT (English)										
90	'49	—	—	—	—	2.95	1	.006-.010	2	.006-.010
90	'50	—	—	.1865-.1875	—	2.95	1	.010-.014	2	.010-.014
TRIUMPH (English)										
Series TRD (1800)	'47-'48	—	—	—	—	2.736	2	—	2	—
Series TRA	'49	.00375	.0015-.002	—	—	3.3460	2	—	2	—
VANGUARD (English)										
Sedan & Est. car	'49	.00375	.0015-.002	—	—	3.3460	2	.003-.007	2	.003-.007
Sedan & Est. Car	'50	.00375	.0015-.002	—	—	3.3460	2	.003-.007	2	.003-.007
VAUXHALL LIP (English)										
Velox	'49	.0013-.0023	.0013-.0023	.300-.286	.280-.286	2.736	1	.008-.021	2	.008-.024
Velox	'50	.0013-.0023	.0013-.0023	.300-.286	.280-.286	2.736	1	.008-.021	2	.008-.024
WILLYS										
Willys Americar	'41	.0205	.003	.170	.160	3 1/8	1	.008	2	.008
Willys Americar	'42	.010	.002	.170	.160	3 1/8	1	.008	2	.008
CJ-2A Universal Jeep	'45	.0215	.003	—	—	3 1/8	1	.010	2	.010
CJ-2A Universal Jeep	'47	.0205-.0225	.003	—	—	3 1/8	1	.008-.013	2	.008-.013
CJ-2A, 2WD & 4WD	'48	.017-.019	.003	.170	.160	3.125	1	.008-.013	2	.008-.013
6 63	'48	.016-.0185	.0025	.170	.160	3.000	1	.008-.016	2	.010-.016
All Four Cyl. models	'49	.017-.019	.003e	.170	.160	3.125	1	.008-.013	2	.008-.013
6-63	'49	.016-.0185	.0015f	.170	.160	3.000	1	.008-.016	2	.010-.016
4-73 Sta. Wgn.	'50	.017-.019	.003	.170	.160	3 1/8	1	.008-.013	2	.008-.013
4 x 4-63 Sta. Wgn.	'50	—	—	—	—	—	1	—	2	—
6-73 Sta. Wgn.	'50	.018-.021	.0021	.170	.160	3 1/8	1	.008-.013	2	.007-.017
4-73 VJ Jeepster	'50	.017-.019	.003	.170	.160	3 1/8	1	.008-.013	2	.008-.013
6-73 VJ Jeepster	'50	.018-.021	.0021	.170	.160	3 1/8	1	.008-.013	2	.007-.017
WOLSELEY (English)										
Four-Fifty	'49	w	—	—	—	2.894	—	—	—	—
Six-Eighty	'49	w	—	—	—	2.894	—	—	—	—
Six-Eighty	'48-'50	w	—	.156	.111	2.894	1	.0085-.0125	2	.0085-.0125
Four-Fifty	'48-'50	w	—	.156	.111	2.894	1	.0085-.0125	2	.0085-.0125

For key to abbreviations see page 47

PISTONS AND PISTON RINGS

ABBREVIATIONS

(a)—No. 1—.170; No. 2—.154.

@—Piston fit should be such that a .0015 feeler ribbon can be drawn from between the piston and the cylinder wall with a 10-20 pound pull.

A—Fit to 9-12 pounds pull with .0015 feeler gauge.

b—Use .0015 x ½ inch feeler stock at 6-10 pound pull.

(b)—.186-.192 upper; .169-.174 lower.

c—Plus .000 to —.0005.

C—Oil ring width .120 max; depth .0620-.0625.

e—Five to 10 pound pull on feeler stock 1 x .003 inch.

f—Five to 10 pound pull on feeler stock ½ x .0015 inch.

(F)—Use .0025 x ½ inch feeler stock at 6-10 pound pull.

I—Intermediate.

—Lower.

m—Millimeters.

M—Minimum.

P—Pass on .10015 feeler gauge, hold on .003 feeler gauge.

s—Skirt clearance 4-6 pounds pull on a .002 x ½ in. feeler at 70°F.

(s)—Eleven to 16 pound pull on feeler 1 x .002 inch.

S—Selective.

S-1—Skirt clearance 5-7 pounds on a .002 x ½ inch feeler at 70°F.

(S)—Fourteen to 19 pound pull on feeler 1 x .002 inch.

T—.078-.079 top; .0775-.0785 centre.

U—Upper.

w—Fit from .0002 interference to .0008 clearance.

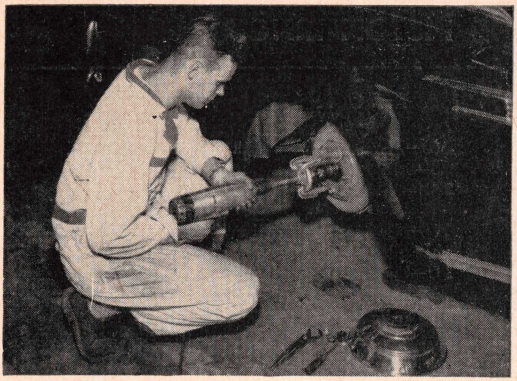
°—With a ½ x 12 x .002 inch feeler gauge in line with thrust surface and 90° from pin hole should require 4-11 pounds pull on scale to withdraw feeler gauge.

†—Piston fit using feeler gauges;

	Go	No-go
	40-.0015	.002
	50-.0015	.002
	70-.0015	.002

‡—At 70°F.

∅—Across thrust faces.



HERE'S PROOF OF *AMAZING* IMPACTOOL SAVINGS

Cylinder Head Repair Removing cylinder head cap screws took only 3 minutes with the electric Impactool. The job required 27 minutes with hand wrenches.

Spring Service Job Mechanics report 2 hours saved on servicing passenger car springs. Installing spring clip nuts took 16 minutes with hand wrenches—33 seconds with Impactool.

Oil Pan Removal Impactool saves as much as 90% of the time on oil pan removal.

Wheel Changing A service operator reports removing and replacing 4 passenger car wheels took 35 minutes using hand wrenches. With the Impactool he now does it in 8 minutes, without any of the former operator fatigue.

Stud Tapping Hand tapping for studs formerly took 9 minutes of tough, fatiguing work. When the Impactool is used the job is done effortlessly in 2½ minutes.

The savings obtained by using the Impactool solely as a nut-runner more than justify its purchase. Be sure your shop is equipped with this modern labour saving, multi-purpose tool. Encourage your mechanics to own their own tools by offering them a weekly repayment plan.

THE MULTI-PURPOSE TOOL

	Diameters Size 4U	Size 8U
Drilling	¼"	⅜"
Reaming	½"	11/16"
Tapping	¼" to ½"	⅜" to ¾"
Nut Running (*bolt size*)	⅜"	⅝"
Screw Driving (*machine*)	⅜"	⅝"
(*wood*)	No. 20	No. 22
Hole Sawing	1½"	2"
Woodboring	29/32"	1¼"
Stud Driving	⅜"	⅜" to ⅝"
Masonry Drilling	⅜"	⅝"
Stud Extracting	⅜"	⅜" to ⅝"
Wire Brushing (*shank size*)	⅜"	½"
Sheet Metal Cutting	20G	16G

JJ-22-A

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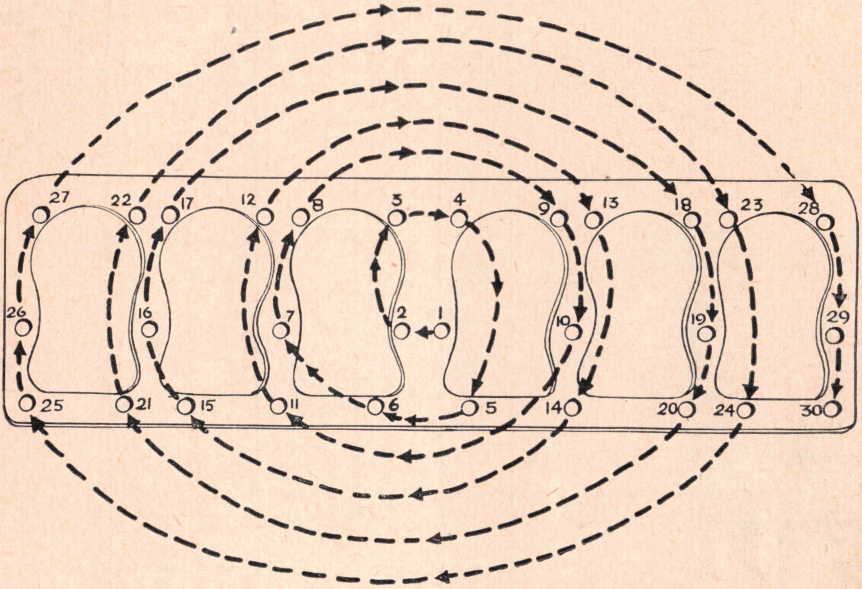
TORQUE WRENCHES



When tightening cylinder head studs follow the ABOVE diagram when the manufacturer's recommended tightening sequence is not available.

TORQUE is a force, or combination of forces, that tends to produce a rotating or twisting motion, the standard unit of measure being foot pounds. Wrenches designed for measuring the tightness of a nut, or stud, are called torque wrenches.

The absolute necessity of using a torque measuring wrench in the assembly of modern motor vehicles has been definitely established by the leading automotive manufacturers. Practically all up-to-date service manuals contain torque data to be used when assembling the various units after a repair operation.

Always follow the procedure and tightening sequence recommended by the car manufacturer.

See following pages for Torque Tension Chart

TORQUE CHART

MANUFACTURERS' RECOMMENDATIONS FOR PROPER TORQUES

Foot pounds of torque for threads clean and dry. If threads are cleaned and oiled, applied torques should be reduced about 10 per cent.

Make and Model Series	YEAR	CYLINDER HEADS Cast Iron	CYLINDER HEADS Aluminum	Engine Bearings: Con. Rod Bear. Bolts	Engine Bearings: Main Bearing Caps	Fly Wheel To Crankshaft	MANIFOLDS: Intake	MANIFOLDS: Exhaust	MANIFOLDS: Water	SPARK PLUGS: Cast Iron Heads	SPARK PLUGS: Aluminum Heads	SPARK PLUGS: Size
AUSTIN (English)												
Devon & Dorset	1950	40	—	40	—	—	—	—	—	—	—	
BUICK												
40-50	1940-1941	65-70	—	45-50	120-130	45-55	25-30	25-30	10-15	25-30	—	
40-50	1942-1946	65-70	—	45-50	120-130	45-55	25-30	25-30	25-30	22-28	—	
60-70-80-90	1940-1941	65-70	—	60-65	120-130	45-55	25-30	25-30	10-15	7-10	—	
60-70-90	1942-1946	65-70	—	60-65	120-130	45-55	25-30	25-30	25-30	22-28	—	
50-50-70	1950	(Not dist. in Canada)										
CADILLAC												
All	1941	70-75	—	50-60	130-140	65-70	25-30	25-30	—	—	—	
All	1942	70-75	—	50-60	140-150	65-70	25-30	25-30	—	—	—	
All	1946	70-75	—	60-65	130-140	Std. 65-70 Hyd. 70-75	25-30	25-30	—	7-10	—	
V-8	1950	(Not dist. in Canada)										
CHEVROLET												
All	1940-1946	75-80	—	*40-45	*100-110	50-65	—	—	—	12-15	—	
CHRYSLER DESOTO DODGE PLYMOUTH												
All	1939-1948	52-57n 7/16		45-50∅	75-80n	—	15-20	15-20	25-30	30-32	—	
		85-90n 1/2		50-75‡	80-85s	—	—	—	—	—	—	
		75-70s(plain)		—	—	—	—	—	—	—	—	
		65-71s(cupped)		—	—	—	—	—	—	—	—	
All	1950	65-70	—	80-50	80-85	55-60	15-20	15-20	15-20	30-32	—	
CROSLEY												
4 cylinder	1950	125-165	—	200-280	150-180	225-285	225-285			225-250	—	
FORD												
All	All	50-60	35-40	35-40	75-80	65-70	—	—	—	24-28	20-24	
HUDSON												
6 Cyl.	1940-1941	40-50	—	40-50	55-75	40-50	15-20	20-30	15-20	25-30	—	
8 Cyl.	1940-1941	45-50	—	40-50	55-75	40-50	15-20	20-30	15-20	25-30	—	
		6 Cyl.-40	—	40	75	45	15	20	20	28	—	
All	1942-1946	8 Cyl.-50	—	40	75	45	15	20	20	28	—	
491, 492	1949	70-75	—	40-45	75-80	40-45	12-15	20-30	—	20-25	—	
493, 494	1949	45-50	—	40-45	70-80	40-45	12-15	20-30	—	20-25	—	
All	1950	70-75	—	40-45	75-80	40-45	12-15	20-30	—	25-30	—	
LINCOLN												
All	1950	(Not dist. in Canada)					—	—	—	—	—	
MERCURY												
All	All	50-60	35-40	35-40	75-80	65-70	—	—	—	28-32	24-28	

SEE MOTOR MAGAZINE FOR LATEST TECHNICAL INFORMATION

. . . THE MOST COMPLETE MECHANICAL SERVICE AVAILABLE IN CANADA

Make and Model Series	YEAR	CYLINDER HEADS Cast Iron	CYLINDER HEADS Aluminum	Engine Bearings: Con. Rod Bear. Bolts	Engine Bearings: Main Bearing Caps	Fly Wheel To Crankshaft	MANIFOLDS: Intake	MANIFOLDS: Exhaust	MANIFOLDS: Water	SPARK PLUGS: Cast Iron Heads	SPARK PLUGS: Aluminum Heads
MORRIS (English)											
Minor	1950	500	—	250	750	—	—	—	—	—	—
Oxford	1950	540	—	250	750	—	—	—	—	—	—
Six	1950	500	—	300	750	—	—	—	—	—	—
NASH											
40 Series	1941-1948	61-64d	—	27-30d	66-70	66-70	—	—	—	25-30	—
60 Series	1941-1948	65-70d	—	50-55d	65-70	96-100	—	—	—	25-30	—
40 Series	1949	60-65d	—	27-30d	65-70	50-55	—	—	—	30	—
60 Series	1949	65-70d	—	50-55d	65-70	95-100	—	—	—	30	—
40 Series	1950	60-65d	—	27-30d	65-70	52-56	—	—	—	30	—
60 Series	1950	60-65d	—	50-55d	65-70	95-100	—	—	—	30	—
10Ser.(Rambler-U.S.)	1950	60-65d	—	27-30d	65-70	52-56	—	—	—	30	—
MG (English)											
TD and Series "Y"	1950	600	—	230	750	—	—	—	—	—	—
OLDSMOBILE											
6 and 8 cyl.	1941-1946	60-70	—	50-55	†100	55-70 Hydra.-60	11-14	22-26	22 26	28-35	—
PACKARD											
6 and 8 cyl.	Before 1942	61	—	60	83	—	—	—	—	—	—
Super 8	Before 1942	61	—	47	68	—	—	—	—	—	—
6 and 8 cyl.	1942-1946	60-62	—	45-46	82-85	65-70	25-30	25-30	—	50	—
Super 8	1942-1946	60-62	—	56-68	82-85	65-70	25-30	25-30	—	50	—
PLYMOUTH											
See Chrysler											
PONTIAC											
All	Before 1946	60	—	45	85	6 Cyl.-105 8 Cyl.-70	—	—	—	—	—
All	1946	60	—	45	85	100	—	—	—	—	—
RILEY (English)											
1½ Litre	1950	540	—	420	250 centre 780 rear	—	—	—	—	—	—
2½ Litre	1950	900	—	450	900	—	—	—	—	—	—
STUDEBAKER											
Champion	Before 1942	50-55	—	25-27	92	—	—	—	—	33-42	—
Pres. & Comm.	Before 1942	83	—	54	92	—	—	—	—	33-42	—
Champion, M5, M15, & M15A Trucks	1942-1946	46-50	—	28-32	88-95	—	—	—	—	—	—
President, M16 Truck	1942-1946	77-83	—	40-44	88-95	—	—	—	—	—	—
Champ. & Comm.	1950	—	—	—	—	33-35	—	—	—	25-30	—
WILLYS											
CJ-2A	1945-1946	65-75 (Screws) 60-65 (Studs)		50-55	65-70	36-40	31-35	31-35	20-25	—	—
WOLSELEY (English)											
4 Cyl.	1950	500	—	300	750	—	—	—	—	—	—
6 Cyl.	1950	500	—	300	750	—	—	—	—	—	—

ABBREVIATIONS; d=Dry n=Nuts s=Screws x Front and Rear—Intermediate—118-122. z Front and Rear—Intermediate—120. ∅=⅜ in. Con. rod nuts ‡=7/16 in. Con. rod nuts * Threads Oiled. †Front and Intermediate—Rear 140. Rockerarm Shaft Bolts—Buick 30-35—Chevrolet 25-30—Nash 15-20. Torque requirements are given in both foot pounds and inch pounds—one foot pound is the same as twelve inch pounds.

IGNITION AND IGNITION TIMING

Make and Model	Year	Ignition Unit—Make	Deg. Adv.—Automatic (R.P.M.)	Max. Vacuum Advance Crankshaft Degrees	Distributor Cam Dwell Angle	Set Breaker Gap (Minimum-Maximum	Breaker Spring Tension (Ozs.) (Min.-Max.)	Timing—Deg. B. or A. TDC	Coil—Amp Draw Engine Stopped	Coil—Amp. Draw Engine Running	Spark Plug—Thread Size (mm)	Spark Plugs—Make and Type (original equipment)	Spark Plug Gap
ANGLIA (English)													
Four Cylinder	'49	O	20/2400	0	50-95	.010-.012	22-27	5B	3.3(a)	1.35(A)	14	Cha L-10	.020-.022
Four Cylinder	'50	L	600-2300	23-27	45	.010-.012	18-20	5B	—	—	14	Cha L-10	.020-.022
AUSTIN (English)													
A.40	'48	L	20-23/2300	—	—	.010-.012	17-20	—	—	—	14	Cha NA8D	.017-.018
A.40 Devon & Dorset	'49	L	20-23/2300	—	—	.010-.012	17-20	—	—	—	14	—	—
A.40 Devon & Dorset	'50	L	20-23/2300	11-13	49±4	.010-.012	20-24	TDC	2.7	1.4	14	Cha N8	.018
BUICK													
Spec. 40; Super 50	'41	DR	13	5-6	—	.015	—	4B	4.5	2.5	10	AC-104	.025
Series 60, 70, 90	'41	DR	13	5-6	—	.015	—	6B	4.5	2.5	10	AC-104	.025
Series 44	'42	DR	13	5-6	—	.015	—	4B	4.5	2.5	14	AC-46	.025
Series 46	'42	DR	13	5-6	—	.015	—	6B	4.5	2.5	14	AC-46	.025
Series 50	'46	DR	22 26/3000	10-12	31	.015	—	4B	4.5	2.5	14	AC-48	.025
Series 70	'46	DR	22 26/3000	10-12	31	.015	—	6B	4.5	2.5	14	AC-48	.025
Series 40	'47	DR	22-26/3000	10-12	31	.015-.017	19-23	4B	4.5	2.5	14	AC-48	.025
Series 50	'47	DR	22-26/3000	10-12	31	.015-.017	19-23	6B	4.5	2.5	14	AC-48	.025
Series 70	'47	DR	22-26/3000	10-12	31	.015-.017	19-23	6B	4.5	2.5	14	AC-48	.025
Series 40, 50, 70	'48	(Not distributed in Canada)											
Series 40, 50, 70	'49	(Not distributed in Canada)											
Series 40, 50, 70	'50	(Not distributed in Canada)											
CADILLAC													
All series	'41	DR	12	8-10	—	.0125	—	5B	4.4	2.2	10	AC-104	.025
All Series	'42	DR	21-24	18	—	.0125	—	5B	4.4	2.2	10	AC-104	.025
V Eight	'46	DR	24	18	31	.0150	—	5B	4.4	2.2	10	AC-104	.030
V-8	'47	DR	24/4000	18	31†	.0125-.0175	19-23	5B	4.4	2.2	10	AC-104	.025-.030
V-8	'48	(Not distributed in Canada)											
V-8	'49	(Not distributed in Canada)											
V-8	'50	(Not distributed in Canada)											
CHEVROLET													
Six	'41	DR	18½	8	—	.018	—	5B	4.8	2.5	14	AC-44	.040
Six	'42	DR	18½	8	—	.018	—	5B	4.8	2.5	14	AC-44	.040
Six	'46	DR	36	20	39	.018	—	5B	4.5	2.5	10	AC-M8	.040
Six	'47	DR	32.5-39.5	20	39	.018	17-21	5B	4.5	2.5	10	AC-M8	.040
Six	'48	DR	32.5-39.5	20	34	.018	17-21	5B	4.5	2.5	10	AC-M8	.040
Six	'49	DR	39.5/3450	20	34	.018-.024	17-21	5B	4.5	2.5	14	AC 46-5	.035
Six	'50	DR	39.5/3450	20	34	.018-.024	17-21	5B	4.5	2.5	14	AC 46-5	.035
CHRYSLER													
Royal 6 C-28	'41	AL	12	8	—	.020	—	TDC	5.0	2.25	14	AL-A7	.025
New Yorker 8 C-30	'41	AL	12	7-9	—	.017	—	TDC	5.0	2.25	14	AL-A7	.025
Crown Cus. C-33	'41	AL	12	5-7	—	.017	—	.004B	5.0	2.25	14	AL-A7	.025
Royal 6 C-34	'42	AL	26	20	—	.020	—	2A	5.0	2.25	14	AL-1-7	.025
New Yorker 8 C-36	'42	AL	24	18	—	.018	—	5A	5.0	2.25	14	AL-1-7	.025
Crown Cus. C-37	'42	AL	12	5-7	—	.018	—	5.0	5.0	2.25	14	AL-A7	.025
C-38W, C-38S	'46	AL	26	20f	34½-38	.020	—	2A	5.0	2.25	14	AL-A5	.025
Six, C-38W, C-38S	'47	AL	11-13/1525	8-10c	34½-38	.020-.024	17-20	2A	5.0	2.3	14	AL-A5	.025
Eight, C-39, C-40	'47	AL	11-13/1750	7-9e	27	.018	18-20	2A	5.0	2.3	14	AL-A5	.025
Six C38W, C38S	'48	AL	11-13/1525	8-10c	34½-38	.020-.024	17-20	2A	5.0	2.3	14	AL-A5	.025
Eight C39, C40	'48	AL	11-13/1750	7-9e	27	.018	18-20	2A	5.0	2.3	14	AL-A5	.025
Six - C-45	'49	AL	11-13/1525	8-10c	34½-38	.020	17-20	2A	5.0	2.3	14	AL-AR5	.038s

For key to abbreviations see page 67 *(Continued on page 56)*

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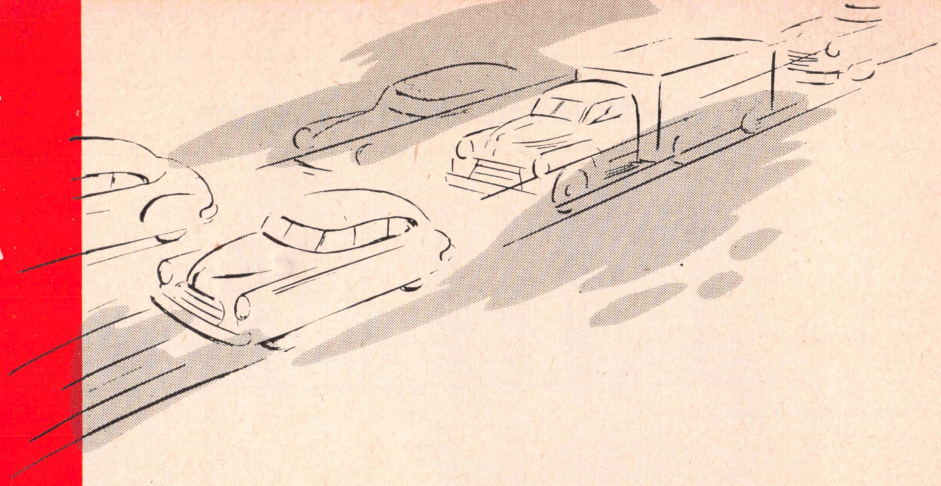

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IGNITION AND IGNITION TIMING

Make and Model	Year	Ignition Unit—Make	Deg. Adv.—Automatic (R.P.M.)	Max. Vacuum Advance Crankshaft Degrees	Distributor Cam Dwell Angle	Set Breaker Gap (Minimum-Maximum)	Breaker Spring Tension (Ozs.) (Min.-Max.)	Timing—Deg. B. or A. TDC	Coil—Amp Draw Engine Stopped	Coil—Amp. Draw Engine Running	Spark Plug—Thread Size (mm)	Spark Plugs—Make and Type (original equipment)	Spark Plug Gap
CHRYSLER—(Continued)													
Eight-C46, C47	'49	AL	11-13/1750	7-9e	27	.018	18-20	2A	5.0	2.3	14	AL-AR5	.038s
Six	'50	AL	11-13/1525	8-10	34½-38	.020	17-20	2A	5.0	2.3	14	AL-AR5	.035(c)
Eight	'50	AL	11-13/1750	7-9	27	.018	18-20	2A	5.0	2.3	14	AL-AR5	.035(c)
CROSLEY													
CC (Up to 41547)	'47	AL	22/2000	0	43	.020-.024	17-20	12B*	5.0	2.0	14	AL-AN7E	.025
CC, CD Up to 106039	'48	AL	22/2000	0	43	.020-.024	17-20	12B*	5.0	2.0	14	AL-AN7E	.025
CD (After 106039)	'49	AL	22/2000	0	43	.020-.024	17-20	12B*	5.0	2.0	14	AL-AN7E	.025
Crosley	'50	AL	34/3000	0	46	.020	17-20	12B	5.0	2.0	14	AL-AN7E	.025
DE SOTO													
Six S-8	'41	AL	12	6-8	—	.020	—	TDC	5.0	2.25	14	AL-A7	.025
Six S-10	'42	AL	24	14	—	.020	—	TDC	5.0	2.25	14	AL-A7	.025
S-11	'46	AL	24	14f	34½-38	.020	—	TDC	5.0	2.25	14	AL-A5	.025
S-11	'47	AL	10-12/1400	5-7f	34½-38	.020-.024	17-20	TDC	5.0	2.25	14	AL-A5	.025
S-11	'48	AL	10-12/1400	5-7f	34½-38	.020-.024	17-20	TDC	5.0	2.25	14	AL-A5	.025
S-13 Custom	'49	AL	10-12/1400	5-7f	34½-38	.020	17-20	TDC	5.0	2.30	14	AL-AR5	.038s
S14	'50	AL	10-12/1400	5-7F	34½-38	.020	17-20	TDC	5.0	2.30	14	AL-AR5	.035(c)
DODGE													
Kingsway 6 D-20	'41	AL	12	7-9	—	.020	—	TDC	5.0	2.25	14	AL-A7	.025
De Luxe 6 D-21	'41	AL	12	7-9	—	.020	—	TDC	5.0	2.25	14	AL-A7	.025
Luxury Liner D-19	'41	AL	12	7-9	—	.020	—	TDC	5.0	2.25	14	AL-A7	.025
De Luxe D-23	'42	AL	12	7-9	—	.020	—	TDC	5.0	2.25	14	AL-A7	.025
Custom D-22	'42	AL	22	14	—	.020	—	TDC	5.0	2.25	14	AL-A7	.025
D-25	'46	AL	20	22f	34½-38	.020	—	TDC	5.0	2.25	14	AL-A5	.025
D-24	'46	AL	20	22f	34½-38	.020	—	TDC	5.0	2.25	14	AL-A5	.025
D-25	'47	AL	10-12/1400	5-7f	34½-38	.020-.024	17-20	TDC	5.0	2.30	14	AL-A5	.025
D-24	'47	AL	10-12/1400	5-7f	34½-38	.020-.024	17-20	TDC	5.0	2.30	14	AL-A5	.025
D-25	'48	AL	10-12/1400	5-7f	34½-38	.020-.024	17-20	TDC	5.0	2.30	14	AL-A5	.025
D-24	'48	AL	10-12/1400	5-7f	34½-38	.020-.024	17-20	TDC	5.0	2.30	14	AL-A5	.025
D-30	'49	AL	10-12/1400	5-7f	34½-38	.020	17-20	TDC	5.0	2.30	14	AL-AR5	.038s
D-31, D-32	'49	AL	10-12/1400	5-7f	34½-38	.020	17-20	TDC	5.0	2.30	14	AL-AR5	.038s
D34-D35-D36	'50	AL	10-12/1400	5-7f	34½-38	.020	17-20	TDC	5.0	2.30	14	AL AR5	.035(c
FORD													
V-8 85	'41	FM	8	—	—	.014	—	4B	5.0	2.8	14	Cha-H10	.025
V-8 85	'42	FM	8	—	—	.014	—	4B	5.0	2.8	14	Cha-H10	.025
De Luxe	'46	FM	26	—	—	.014	—	4B	—	—	14	Cha-H10	.025
Super De Luxe	'46	FM	26	—	—	.014	—	4B	—	—	14	Cha-H10	.025
De L. & Super De L.	'47	FM	26	0	36	.014-.016	20-24	4B	5.0	2.8	14	Cha-H10	.025
De L. & Super De L.	'48	FM	26	0	36	.014-.016	20-24	4B	5.0	2.8	14	Cha-H10	.025
V-8	'49	AL	17-19/4000	(M)	60-65F	.014-.016	17-20	2B	—	—	14	Cha-H10	.025-.028
Ford	'50	FM	27	17-19	60-65P	.014-.016	17-20	2B	5.0	3.0	14	AC or Cha	.028-.032
FRAZER													
F-47	'47	AL	20/3400	15	38	.020-.024	17-20	TDC	5.0n	3.0	14	Cha & AL	.032
F-47-47C-485-486	'48	AL	20/3400	15	38	.020	17-20	TDC-E	5.0n	3.0	14	AL-A5	.032
Series F-495, 496	'49	AL	650	10	38	.020	17-20	4B	5.0	3.0	14	AL-A5	.032
Series F-495, 496	'50	AL	650	10	38	.020	17-20	4B	5.0	3.0	14	AL-A5	.032

For key to abbreviations see page 67

IGNITION AND IGNITION TIMING

Make and Model	Year	Ignition Unit—Make	Deg. Adv.—Automatic (R.P.M.)	Max. Vacuum Advance Crankshaft Degrees	Distributor Cam Dwell Angle	Set Breaker Gap (Minimum-Maximum	Breaker Spring Tension (Ozs.) (Min.-Max.)	Timing—Deg. B. or A. TDC	Coil—Amp Draw Engine Stopped	Coil—Amp. Draw Engine Running	Spark Plug—Thread Size (mm)	Spark Plugs—Make and Type (original equipment)	Spark Plug Gap
HILLMAN MINX (English)													
Mark III	'49	L	20	—	—	.010-.012	20-22	7B	2.7	1.4	14	Cha L-10	.028-.032
Mark IV	'50	L	20	—	45(L)	.010-.012	20-24	7B	2.7	1.4	14	Cha L-10	.028-.032
HUDSON													
Six	'41	AL	11¾	6.8-8.5	—	.020	—	½B	4.5	2.5	14	Cha-J9	.032
Eight	'41	AL	17½	0	—	.017	—	TDC	4.5	2.5	14	Cha-J9	.032
Sixes	'42	AL	11¾	6.8-8.5	—	.020	—	½B	4.5	2.5	14	Cha-J9	.032
Eights	'42	AL	17½	0	—	.017	—	TDC	4.5	2.5	14	Cha-J9	.032
Six-51, 52	'46	AL	23	15	34	.020	—	½B	4.5	2.5	14	Cha-J9	.032
Eight-53, 54	'46	AL	35	15	30½	.017	—	TDC	4.5	2.5	14	Cha-J9	.032
Six-1 1, 172	'47	AL	23	15	34	.020	18m	½B	4.5	2.5	14	Cha-J9	.032
Eight-173, 174	'47	AL	35	15	30½	.017	18m	TDC	4.5	2.5	14	Cha-J9	.032
Series 481, 482	'48	AL	24/4000	17	38	.020	17-20	TDC	4.5	2.5	14	Cha-J7	.032-.045
Series 483, 484	'48	AL	35/34000	17	27	.017	17-20	TDC	4.5	2.5	14	Cha-J7	.032-.045
Series 491, 492	'49	AL	24/4000	17	38	.020	17-20	TDC	4.5	2.5	14	Cha-J-9	.032-.045
Series 493, 494	'49	AL	35/34000	17	27	.017	17-20	TDC	4.5	2.5	14	Cha-J-9	.032-.045
Series 500	'50	AL	10/1200	—	38	.020	17-20	TDC	4.5	2.5	14	Cha H-8	.032
Series 501 and 502	'50	AL	8/2000	—	38	.020	17-20	TDC	4.5	2.5	14	Cha H-8	.032
Series 503 and 504	'50	AL	16.5/1700	—	27	.017	17	TDC	4.5	2.5	14	Cha H-8	.032
HUMBER HAWK (English)													
Super Snipe Mk. II	'48	L	20	12	—	.010-.012	20-24	6B	—	—	14	Cha L-10	.028.-032
Mark III	'49	L	—	—	—	.010-.012	—	4B	—	—	14	ChaL-10	.028-.032
Hawk M. III	'49	L	9-11	4-6(L)	45	.010-.012	20-24	4B	2.7	1.4	14	Cha L-10	.028-.032
Pullman Mk. II	'49	L	20	12	—	.010-.012	20-24	6B	—	—	14	Cha L-10	.028-.032
Super Snipe Mk. II	'49	L	20	12	—	.010-.012	20-24	6B	—	—	14	Cha L-10	.028-.032
Hawk Mk. III	'50	L	9-11	4-6	45	.010-.012	20-24	4B	2.7	1.4	14	Cha L-10	.028-.032
Pullman Mk. II	'50	L	20	12	—	.010-.012	20-24	6B	2.9	1.5	14	Cha L-10	.028-.032
Super Snipe Mk. II	'50	L	20	12	—	.010-.012	20-24	6B	—	—	14	Cha L-10	.028-.032
JAGUAR (English)													
1½ Litre Saloon	'46-48'	L	22/1800	—	47	.010-.012	20-24	5B	2.80	1.5	14	Cha (2)	.022-.025
2½ Litre S & C	'46-'48	L	13/2200	14'18	38	.010-.012	20-24	10B	2.88	1.5	14	Cha (1)	.022-.025
3½ Litre S & C	'46-'48	L	13/1900	22-26	38	.010-.012	20-24	10B	2.88	1.5	14	Cha (2)	.022-.025
2½ Ltre. S&C Mk.V	'49	L	13/2200	14-18	38	.010-.012	20-24	5B	2.88	1.5	14	Cha N8	.022-.025
2½ Ltre. S&C Mk.V	'49	L	13/1900	22-26	38	.010-.012	20-24	5B	2.88	1.5	14	Cha L.10	.022-.025
3½ Litre. XK120 S.S.	'49	L	16/1400	22-26	38	.010-.012	20-24	5B	2.88	1.5	14	Cha NA8	.022-.025
KAISER													
K-100	'47	AL	20/3400	15	38	.020-.024	17-20	TDC	5.0n	3.0	14	AL or Cha	.032
K-100-101-481-482	'48	AL	20/3400	15	38	.020	17-20	TDC-E	5.0n	3.0	14	AL-A5	.032
Series K-491, 492	'49	AL	650	10	38	.020	17-20	4B	5.0	3.0	14	AL-A5	.032
K-491, 492	'50	AL	650	10	38	.020	17-20	4B	5.0	3.0	14	AL-A5	.032
LINCOLN													
Lincoln & Linc. Cont.	'41	O	10	—	—	.014	—	4B	4.2	3.2	14	Cha-H10	.028
Lincoln & Linc. Cont.	'47	O	23/3300	0	36	.014-.016	20-24	4B	7.0	5.0	14	Cha-H10	.028
Linco n & Linc. Cont.	'48	O	23/3300	0	36	014-.016	20-24	4B	7.0	5.0	14	Cha-H10	.028
Lincoln & Linc. Cont.	'49	(Not distributed in Canada)											
Lincoln & Linc. Cont.	'50	(Not distributed in Canada)											

For key to abbreviations see page 67

IGNITION AND IGNITION TIMING

Make and Model	Year	Ignition Unit—Make	Deg. Adv.—Automatic (R.P.M.)	Max. Vacuum Advance Crankshaft Degrees	Distributor Cam Dwell Angle	Set Breaker Gap (Minimum-Maximum)	Breaker Spring Tension (Ozs.) (Min.-Max.)	Timing—Deg. B. or A. TDC	Coil—Amp Draw Engine Stopped	Coil—Amp. Draw Engine Running	Spark Plug—Thread Size (mm)	Spark Plugs—Make and Type (original equipment)	Spark Plug Gap
MERCURY													
Mercury	'41	FM	8	—	—	.014	—	4B	5.0	2.8	14	Cha-H10	.025
Mercury	'42	FM	8	—	—	.014	—	4B	5.0	2.8	14	Cha-H10	.025
114 & 114X	'46	FM	26	—	—	.014	—	4B	—	—	14	Cha-H10	.025
118	'46	FM	26	—	—	.014	—	4B	—	—	14	Cha-H10	.025
114, 114X, 118	'47	FM	26	0	36	.014-.016	20-24	4B	5.0	2.8	14	Cha-H10	.025
114, 114X & 118	'48	FM	26	0	36	.014-.016	20-24	4B	5.0	2.8	14	Cha-H10	.025
Mercury	'49	AL	17-19/4000	(M)	60-65	.014-.016	17-20	2B	—	—	14	Cha-H10	.025-.028
Mercury	'50	FM	21	17/19	60-65	.014-.016	17-20	2B	5.0	3.0	14	AC or Cha	.028-.032
METEOR													
Meteor	'49	AL	17-19/4000	(M)	60-65	.014-.016	17-20	2B	—	—	14	Cha-H10	.025-.028
Meteor	'50	FM	27	17-19	60-65	.014-.016	17-20	2B	5.0	3.0	14	AC or Cha	.028-.032
MG (English)													
T.C.	'48	L	14-16/2250 N		—	.010-.012	20-24	TDC	2.7	1.4	14	Cha L-10	.018-.022
Series Y	'49	L	14-16/2250 N		—	.010-.012	20-24	TDC	2.7	1.4	14	Cha L-10	.018-.022

For key to abbreviations see page 67

STARTING MOTOR TROUBLES

- **Mechanical Troubles** — Worn Bearings; Shaft Bent; Commutator Burnt; Loose Pole Piece; Broken Bendix; Armature Off Centre → All Indicated by Excessive Current Draw and Slow Cranking or Complete Failure to Crank and Excessive Noise
- **Electrical Troubles**
  - Brush Rigging — Pigtails; Brushes Not Contacting → Brushes Too Short; Poor Spring Pressure; Dirty or Burned Commutator → All Indicated by Low Current or No Current and Failure to Crank. If Only Partial Open Occurs the Current Draw will be Low and Cranking Slow.
  - OPEN CIRCUIT
    - Armature → Intense Blue Spark at Brush and Flatted Commutator with Slow Cranking
    - Fields → No Current; No Cranking
  - GROUND OR SHORT CIRCUIT
    - Fields → Excess Current; Slow Cranking
    - Armature → Excess Current; Burnt Insulation; Slow Cranking
    - Commutator → Excessive Current; No Cranking
    - Brush Rigging — Main Terminal; Brush Holders; Pigtails and Connectors → Indicated by Excessive Current and No Cranking or Slow Cranking

STARTING MOTOR "Trouble-Shooting" CHART

IGNITION AND IGNITION TIMING

Make and Model	Year	Ignition Unit—Make	Deg. Adv.—Automatic (R.P.M.)	Max. Vacuum Advance Crankshaft Degrees	Distributor Cam Dwell Angle	Set Breaker Gap (Minimum-Maximum)	Breaker Spring Tension (Ozs.) (Min.-Max.)	Timing—Deg. B. or A. TDC	Coil—Amp Draw Engine Stopped	Coil—Amp. Draw Engine Running	Spark Plug—Thread Size (mm)	Spark Plugs—Make and Type (original equipment)	Spark Plug Gap
MG—(Continued)													
Series TD	'50	L	14-16/2225	NV	43-47(L)	.010-.012	20-24	TDC	2.5	1.05	14	T	.020-.022
Series Y	'50	L	14-16/1350	NV	43-47(L)	.010-.012	20-24	TDC	2.5	1.05	14	Cha L-10S	.020-.022
MONARCH													
Monarch	'46	FM	26	—	—	.014	—	4B	—	—	14	Cha-H10	.025
Monarch	'47	FM	26	0	36	.014-.016	20-24	4B	5.0	2.8	14	Cha-H10	.025
Monarch	'48	FM	26	0	36	.014-.016	20-24	4B	5.0	2.8	14	Cha-H10	.025
Monarch	'49	AL	17-19/4000	(M)	60-65	.014-.016	17-20	2B	—	—	14	Cha-H10	.025-.028
V-8	'50	FM	21	17-19	60-65	.014-.016	17-20	2B	5.0	3.0	14	AC or Cha	.023-.032
MORRIS (English)													
8 Series E	'48	L	9-11/2150	—	—	.010-.012	20-24	TDC	3.5-4	1.60	14	Cha L-10	.018-.022
10 Series M	'48	L	9-11/2150	—	—	.010-.012	20-24	TDC	2.7	1.40	14	Cha L-10	.018-.022
Minor	'48	L	9-11/1900	NV	—	.010-.012	20-24	TDC	2.5	1.05	14	Cha L-10	.018-.022
Oxford	'48	L	9-11/1900	NV	43-47(L)	.010-.012	20-24	TDC	2.5	1.05	14	Cha L-10	.018-.022
Oxford	'49	L	9-11/1900	NV	43-47(L)	.010-.012	20-24	TDC	2.5	1.05	14	Cha L-10	.018-.022
Minor	'49	L	9-11/1900	NV	—	.010-.012	20-24	TDC	2.5	1.05	14	Cha L-10	.018-.022
Six	'49	L	18-20/1900	9-11	22-38	.010-.012	20-24	5B	2.5	1.05	14	Cha L-10	.018-.022
Minor	'50	L	9-11/1900	NV	—	.010-.012	20-24	TDC	2.5	1.05	14	Cha L-10	.018-.022
Six	'50	L	18-20/1900	9-11	22-38	.010-.012	20-24	5B	2.5	1.05	14	Cha L-10	.018-.022
Oxford	'50	L	9-11/1900	NV	43-47(L)	.010-.012	20-24	TDC	2.5	1.05	14	Cha L-10	.018-.022
NASH													
Ambassador 600	'41	DR	10	8.5	—	.018-.024	—	TDC	5.0	2.0	14	AL-AN7	.025
Ambassador 6	'41	AL	11.5	0	—	.020	—	6B	5.0	2.0	14	AC-45	.025
Ambassador 8	'41	AL	12	0	—	.017	—	9B	5.0	2.0	14	AC-45	.025
4240—"6"	'42	DR	18	17	—	.020	—	TDC	—	—	14	AL-AN7	.025
4260—"6"	'42	AL	9	6	—	.020	—	4B	—	—	14	AC-45	.025
4280—"8"	'42	AL	12½	6	—	.017	—	7B	—	—	14	AC-45	.925
Series 4640	'46	AL	21	17	—	.020	—	TDC	—	—	14	AL-A5	.025
Series 4660	'46	AL	24	12	—	.020	—	4B	—	—	14	AL-A5	.025
Series 4740	'47	AL	21/2800	17	—	.020	17-20	TDC	—	—	14	AL-A5	.025
Series 4760	'47	AL	24	12	—	.020	17-20	TDC	—	—	14	AC-44	.025
Series 4840	'48	AL	Da	Mv	35	.020	17-20	fd	6.0	2.0	14	AL-AN7	.025
Series 4860	'48	AL	Daa	Mvv	38	.020	17-20	fd	6.0	2.0	14	AC-45	.025
Series 4940	'49	DR	22/2800	15	35	.018-.024	17-21	TDC	—	—	14	AL-A5	.030†
Series 4960	'49	DR	28/2700	12	35	.018-.024	17-21	TDC	—	—	14	(S)	.030†
Canadian Statesman	'50	AL	11/1450	7½	39N	.018-.022	17-20	TDC	—	—	14	AL-A5	.030
Statesman (U.S.)	'50	DR	11/1400	7½	35	.018-.024	17-21	TDC	—	—	14	AL-A5	.030
Ambassador (U.S.)	'50	DR	14/1350	6	35	.018-.024	17-21	TDC	—	—	14	AC-44	.030
Rambler (U.S.)	'50	DR	11/1400	7½	31-37	.018-.024	17-21	TDC	—	—	14	AL-A5	.030
OLDSMOBILE													
Six	'41	DR	14	10	—	.018-.024	—	TDC	4.5	2.0	14	AC-44	.040
Eight	'41	DR	15	7.5	—	.0125	—	2B	4.5	2.0	14	AC-44	.030
Six	'42	DR	14	10	—	.018-.024	—	TDC	4.5	2.0	14	AC-44	.040
Eight	'42	DR	15	7.5	—	.0125	—	2B	4.5	2.0	14	AC-44	.030
Six	'46	DR	22	12	35	.020	—	TDC	4.5	2.0	14	AC-48	.040
Eight	'46	DR	22	12	31	.015	—	2B	4.5	2.0	14	AC-48	.030

(Continued on page 61

For key to abbreviations see page 67

IGNITION AND IGNITION TIMING

Make and Model	Year	Ignition Unit—Make	Deg. Adv.—Automatic (R.P.M.)	Max. Vacuum Advance Crankshaft Degrees	Distributor Cam Dwell Angle	Set Breaker Gap (Minimum-Maximum)	Breaker Spring Tension (Ozs.) Min.-Max.)	Timing—Deg. B. or A. TDC	Coil—Amp Draw Engine Stopped	Coil—Amp. Draw Engine Running	Spark Plug—Thread Size (mm)	Spark Plugs—Make and Type (original equipment)	Spark Plug Gap
OLDSMOBILE—(Continued)													
Six	'47	DR	20-24/3200	16†	35	.018-.024	17-21	TDC	4.5	2.0	14	AC-44-45	.040
Eight	'47	DR	20-24/3200	12†	31	.0125-.0175	19-23	2B	4.5	2.0	14	AC-44-45	.030
Six	'48	DR	20-24/3200	16†	35	.018-.024	17-21	TDC	4.5	2.0	14	AC-44-45	.040
Eight	'48	DR	20-24/3200	12†	31	.0125-.0175	19-23	2B	4.5	2.0	14	AC-44-45	.030
Six	'49	DR	22/4000†	16†	35	.020	17-21	TDC	4.5	2.0	14	AC-45	.040
Eight	'49	DR	30/4500†	20	22	.012-.0175	19-23	2½B	4.5	2.0	14	AC-44	.030
Eight ("88")	'50	DR	30/3700†	20	22	.0125-.0175	19-23	—	4.5	2.0	14	AC-45	.030
Six ("76")	'50	DR	22/3200†	16†	35	.021	17-21	—	4.5	2.0	14	AC-45	.040
PACKARD													
110-6	'41	AL	9.5	6.5-8.5	—	.020	—	6B	5.0	2.75	10	Va-Ks	.025
110-160-180-8	'41	AL	11.5	4.5-6.5	—	.017	—	5B	5.0	2.4	10	Va-Ks	.025
120	'41	AL	11.5	5-7	—	.017	—	7B	5.0	2.4	10	Va-Ks	.025
Super 8	'41	AL	11.5	5-7	—	.017	—	5B	5.0	2.4	10	Va-Ks	.025
"6"—2000	'42	b	9.5	6.5-8.5	—	.018	—	4B	5.0	2.75	10	Va-KK	.025
"8"—2001	'42	AL	11.5	5-7	—	.017	—	5B	5.0	2.4	10	Va-KK	.025
"Super 8"—2003, 6	'42	AL	11.5	5-7	—	.017	—	4B	5.0	2.4	10	Va-KK	.025
2100	'46	AL	—	—	—	.020	—	4B	5.0	2.75	10	††	.025-.030
2101 & 2111	'46	AL	—	—	—	.015	—	5B	5.0	2.4	10	††	.025-.030
2103 & 2126	'46	AL	—	—	—	.015	—	4B	5.0	2.4	10	††	.025-.030
2100-2130	'47	b	(b)	7.5	38	.018-.022	19-23	4B	5.0	2.75	10	††	.028
2101, 2111	'47	AL	10.75	6.0	27	.0125-.0175	19-23	5B	5.0	2.4	10	††a	.028
2103, 2106, 2126	'47	AL	11.5	5.5	27	.0125-.0175	19-23	4B	5.0	2.4	10	††a	.028
2201, 2211	'48	b	—	—	—	.0125-.0175	19-23	6B	5.0	2.4	10	††a	.025-.030
2202, 2232	'48	b	—	—	—	.0125-.0175	19-23	6B	5.0	2.4	10	††a	.025-.030
2206, 2233	'48	AL	—	—	—	.0125-.0175	19-23	6B	5.0	2.4	10	††a	.025-.030
2301	'49	b	—	—	—	.0125-.0175	19-23i	6B	4.5	2.75E	10	††a	.025-.030
2302, 2332	'49	b	—	—	—	.0125-.0175	19-23i	6B	4.5	2.75E	10	††a	.025-.030
2306, 2333	'49	AL	—	—	—	.0125-.0175	19-23i	6B	4.5	2.75E	10	††a	.025-.030
2301	'50	b	—	—	—	.0125-.0175	17-23i	6B	4.5	2.75E	10	††a	.025-.030
2302, 2332	'50	b	—	—	—	.0125-.0175	17-23i	6B	4.5	2.75E	10	††o	.025-.030
2306, 2333	'50	AL	—	—	—	.0125-.0175	19-23i	6B	4.5	2.75E	10	††a	.025-.030
PLYMOUTH													
Roadking P-11	'41	AL	12	6-8	—	.020	—	TDC	5.5	2.25	14	AL-A7	.025
De Luxe 6 P-12	'41	AL	11	9-11	—	.020	—	TDC	5.5	2.25	14	AL-A7	.025
De Luxe P-14	'42	AL	22	16	—	.020	—	TDC	5.5	2.25	14	AL-A7	.025
P-15	'46	AL	20	22f	34½-38	.020	—	TDC	5.0	2.25	14	AL-A5	.025
P-15	'47	AL	11-13/1750	9-11f	34½-38	.020-.024	17-20	TDC	5.0	2.25	14	AL-A5	.025
P15	'48	AL	11-13/1750	9-11f	34½-38	.020-.024	17-20	TDC	5.0	2.25	14	AL-A5	.025
P-17, P-18	'49	AL	10-12/1400	5-7f	34½-38	.020	17-20	TDC	5.0	2.30	14	AL-AR5	.038s
P-19, P-20	'50	AL	10-12/1400	5-7P	34½-30	.020	17-20	TDC	5.0	2.30	14	AL-AR5	.035±.001
PONTIAC													
Fleet. & Torpedo 6	'41	DR	14¼	7.5	—	.018-.024	—	4B	3.5	2.0	14	AC-45	.025
Sixes	'42	DR	14¼	7.5	—	.018-.024	—	4B	3.5	2.0	14	AC-45	.025
Six	'46	DR	28½	15	37	.020	—	4B	—	1.5	14	AC-45	.025
Eight	'46	DR	28	20	31	.015	—	4B	—	1.8	14	AC-45	.025
Six	'47	DR	28.5/4000	17	37	.020	17-21	4B	4.5	1.8	14	AC-45	.025
Eight	'47	DR	26/4200	18-22	31	.015	19-23	4B	4.5	1.8	14	AC-45	.025

(*Continued on page 63*)

For key to abbreviations see page 67

IGNITION AND IGNITION TIMING

Make and Model	Year	Ignition Unit—Make	Deg. Adv.—Automatic (R.P.M.)	Max. Vacuum Advance Crankshaft Degrees	Distributor Cam Dwell Angle	Set Breaker Gap (Minimum-Maximum)	Breaker Spring Tension (Ozs.) (Min.-Max.)	Timing—Deg. B. or A. TDC	Coil—Amp Draw Engine Stopped	Coil—Amp. Draw Engine Running	Spark Plug—Thread Size (mm)	Spark Plugs—Make and Type (original equipment)	Spark Plug Gap
PONTIAC—(Continued)													
Six	'48	DR	28.5	17	37	.020	17-21	4B	4.5	1.8	14	AC-45	.025
Eight	'48	DR	28	18-22	31	.015	19-23	4B	4.5	1.8	14	AC-45	.025
Six .2000, 2200 ,2500	'49	DR	25/40 mph.	25	37	.020	17-21	2-6B	—	—	14	AC-45	.023-.028
Eight	'49	DR	25/40 mhp.	25	31	.015	19-23	2-6B	—	1.8	14	AC-45	.023-.028
Six. 2000, 2200, 2500	'50	DR	25/4000	15	31-37	.022	17-21	—	—	2.5	14	AC-45	.023-.028
Eight-27	'50	DR	25/4200	20	21-30	.016	19-23	—	—	2.5	14	AC-45	.023-.028
N.B. Fleetleaders (1941-2-6-7-8) are 20 and 22 Series; Torpedo 6 & 8 (1941-2-6-7-8) are 25 and 27 Series respectively. Streamliner 6 & 8 (1941-2-6-7-8) are 26 and 28 Series respectilvely; Streamliner 6 & 8 (1948) not distributed in Canada.													
PREFECT (English)													
Four Cylinder	'49	O	20/2400	0	50-95	.010-.012	22-27	5B	3.3(a)	1.35	14	Cha L-10	.020-.022
Four Cylinder	'50	L	600-2300	23-27	45	.010-.012	18-20	5B	—	—	14	Cha L-10	.020-.022
RILEY (English)													
100 hp 2½-Litre	'49	L	—	—	—	.012-.015	—	8B	—	—	14	Cha NA8	.030
1½ Litre	'46-'50	L	20-23/2000	NV	43-47(L)	.012-.015	20-24	8B	2.5	1.05	14	Cha L10S	.030

(Continued on page 65)

For key to abbreviations see page 67

FIRING ORDER of Current Automotive Engines . . .

4 Cylinder: (*In line engines*)
Ford Model "A" Riley 1-2-4-3
All makes 1-3-4-2

6 Cylinder: (*In line engines*)
All makes 1-5-3-6-2-4

8 Cylinder: (*In line engines*)
All makes (Except Hupmobile) 1-6-2-5-8-3-7-4
Hupmobile 1-4-7-3-8-5-2-6

8 Cylinder: ("*V*" *type engines*)
Ford, Monarch, Mercury 1-5-4-8-6-3-7-2
(indicating L-R banks) 1R-1L-4R-4L-2L-3R-3L-2R
Cadillac 1-8-7-3-6-5-4-2
(indicating L-R banks) 1L-4RL4L-2L-3R-3L-2R-1R

12 Cylinder: ("*V*" *type engines*)
Lincoln 1-4-9-8-5-2-11-10-3-6-7-12
(indicating L-R banks) 1L-2R-5L-4R-3L-1R-6L-5R-2L-3R-4L-6R
Packard 1-4-9-8-5-2-11-10-3-6-7-12

Cylinder Identification

All "in line" engines— No. 1 is front cylinder.

"V8" engines—No. 1 is right front cylinder (viewed from the driver's seat). No. 8 is rear cylinder on the left-hand bank.

12 cylinder engines— No. 1 is the front cylinder (left-hand bank, viewed from the driver's seat). Odd numbers are left bank cylinders while even numbers right-hand bank cylinders.

IGNITION AND IGNITION TIMING

Make and Model	Year	Ignition Unit—Make	Deg. Adv.—Automatic (R.P.M.)	Max. Vacuum Advance Crankshaft Degrees	Distributor Cam Dwell Angle	Set Breaker Gap (Minimum-Maximum)	Breaker Spring Tension (Ozs.) (Min.-Max.)	Timing—Deg. B. or A. TDC	Coil—Amp Draw Engine Stopped	Coil—Amp. Draw Engine Running	Spark Plug—Thread Size (mm)	Spark Plugs—Make and Type (original equipment)	Spark Plug Gap
RILEY—(Continued)													
2½ Litre	'47-'50	L	18-22/2200	NV	43-47 (L)	.012-.015	20-24	8B	2.5	1.05	14	Cha NA8	.030
ROVER (English)													
75	'49	L	24	24	—	.012	20-24	11B	2.7	1.4	14	L-HLNR	.023-.026
STUDEBAKER													
Commander 6-11A	'41	AL	10	5-7	—	.020	—	2B	4-5	.5-.125	18	Cha-8	.025
President 8-7C	'41	AL	13.5	5-7	—	.020	—	TDC	4.5	.5-.125	18	Cha-8	.025
Champion 6-3G	'41	AL	7	8-10	—	.020	—	2B	4.5	.5-.125	14	Cha-J8	.025
Commander 6-12A	'42	AL	21	12	—	.020	—	2B	4.5	.5-.125	18	Cha-J9	.025
President 8-8C	'42	AL	27	12	—	.020	—	TDC	4.5	.5-.125	14	Cha-J9	.025
Champion 6-4G	'42	AL	14	18	—	.020	—	2B	4.5	.5-.125	14	Cha-J9	.025
Skyway, 5G	'46	AL	14	18	35	.020	—	2B	4.5	.5-.125	14	Cha-J9	.025
Champion-6G	'47	AL	14/2800	18	35	.020	17-20	2B	4.5	1.0	14	Cha-J9	.025
Commander-14A	'47	AL	22/1400	12	35	.020	17-20	2B	4.5	1.0	14	Cha-J9	.025
Champion 7G	'48	AL	14/2800	18	38	.020	17-20	2B	4-5	.5-1.5	14	Cha-J7/J9 H	
Commander 15A	'48	AL	22/1400	12	38	.020	17-20	2B	4-5	.5-1.5	14	Cha-J7/J9 H	
Champion - 8-G	'49	AL	14	18	38-40	.020	17-20	2B	4-5	.5-1.5	14	Cha J7/J9	.025
Commander - 16-A	'49	AL	22	12	38-40	.020	17-20	3/8B	4-5	.5-1.5	14	Cha J7/J9	.025
Champion 9G	'50	AL	14	18	38-40	.020	17-20	2B	4-5	½-1½	14	Cha	.022-.027
Commander 17A	'50	AL	22	12	31-37	.022	17-21	2B	4-5	½-1½	14	Cha	.022-.027
SUNBEAM TALBOT (English)													
90	'49	L	—	—	—	.012	—	1B	—	—	14	Cha-NA8	.028-.032
90	'50	L	14-16	12	—	010-.012	20-24	1B	—	—	14	Cha NA8	.028-.032
TRIUMPH (English)													
Series TRD (180	47-48	L	—	—	—	.012	—	8B	—	—	14	Cha N-8	.038-.040
Series TRA	'49	L	—	—	—	.012	—	TDC	—	—	14	Cha L-10	.024-.028
VANGUARD (English)													
Sedan & Est. car	'49	L	—	—	—	.010-.012	—	TDC	—	—	14	Cha L10	.025
Sedan & Est. car	'50	L	—	—	—	.010-.012	—	TDC	—	—	14	Cha L-10	.025
VAUXHALL LIP (English)													
Velox	'49	L	18	7-9	38†	.012-.014	20.24	2B	2.9	1.5	14	AC VF9	.028-.030
Velox	'50	L	18	7-9	38†	.012-.014	20-24	2B	2.9	1.5	14	AC VF9	.028-.030
WILLYS													
Willys Americar	'41	AL	9.5	11	—	.020	—	TDC	5.0	2.5	14	(B)	.030
Willys Americar	'42	AL	—	15	—	.020	—	TDC	5.0	2.5	14	Cha-J9	.030
CJ-2A Universal Jeep	'45	AL	11	0	41	.020	—	TDC(z)	5.0	2.5	14	AL-AN7	.030
CJ-2A Universal Jeep	'47	AL	11	—	41	.020	17-20	TDC	5.0	2.5	14	AL-AN7	.030
CJ-2A	'48	AL	22/3000	0	39	.020s	17-20	5B	5.0	1.5-2	14	AL-AN7	.030
4-63, 2WD, 4WD	'48	AL	22/3000	20	51	.020s	17-20	5B	5.0	1.5-2	14	AL-AN7	.030
6-63	'48	AL	22/3000	20	38½	.020s	17-20	5B	5.0	1.5-2	14	AL-AN7	.030
CJ-2A	'49	AL	22/3000	0	39	.020s	17-20	5B	5.0	1.5-2	14	AL-AN7,J9	.030
4-63, 2 WD, 4 WD	'49	AL	22/3000	20	51	.020s	17-20	5B	5.0	1.5-2	14	AL-AN7,J9	.030

For key to abbreviations see page 67

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IGNITION AND IGNITION TIMING

Make and Model	Year	Ignition Unit—Make	Deg. Adv.—Automatic (R.P.M.)	Max. Vacuum Advance Crankshaft Degrees	Distributor Cam Dwell Angle	Set Breaker Gap (Minimum-Maximum)	Breaker Spring Tension (Ozs.) (Min.-Max.)	Timing—Deg. B. or A. TDC	Coil—Amp Draw Engine Stopped	Coil—Amp. Draw Engine Running	Spark Plug—Thread Size (mm)	Spark Plugs—Make and Type (original equipment)	Spark Plug Gap
WILLYS—(Continued)													
6-63	'49	AL	22/3000	20	38½	.020s	17-20	TDC	5.0	1.5-2	14	AL-AN7,J9	.030
CJ-3A	'49	AL	22/3000	0	39	.020s	17-20	5B	5.0	1.5-2	14	AL-AN7,J9	.030
4-73 Sta. Wgn.	'50	AL	22/4000	10	51	.020	17-20	TDC	5.0n†	—	14	Cha-J7	.030
4x4-63 Sta. Wgn.	'50												
6-73 Sta. Wgn.	'50	AL	24/3000	12	39	.020	17-20	TDC	5.0n†	—	14	Cha-J7	.030
4-73 VJ Jeepster	'50	AL	22/400	10	51	.020	17-20	TDC	5.0n†	—	14	Cha-J7	.030
6-73 VJ Jeepster	'50	AL	24/300	12	39	.020	17-20	TDC	5.0n†	—	14	Cha-J7	.030
WOLSELEY (English)													
Four-Fifty	'49	L	—	—	—	.010-.012	20-24	TDC	—	—	14	Cha L-10	.018-.022
Six-Eighty	'49	L	—	—	—	.010-.012	20-24	TDC	—	—	14	Cha L-10	.018-.022
Six-Eighty	'48-'50	L	18-20/2380	9-11	22-38(L)	.010-.012	20-24	5B	2.5	1.05	14	Cha L-10	.018-.022
Four-Fifty	'48-'50	L	20-23/2350	9-11	43-47(L)	.010-.012	20-24	5B	2.5	1.05	14	Cha L-10	.018-.022

ABBREVIATIONS

(a)—At 5.8 volts.
A—After TDC.
(A)—At 6 volts running at 1,000 r.p.m.
AL—Auto-Lite.
b—Auto-Lite or Delco-Remy.
(b)—AL—9.5°; DR—10°.
B—Before TDC.
c—At 15" HG (mercury).
Cha—Champion.
Da—400 r.p.m.=4.5°; 940 r.p.m.=8°; 1,400 r.p.m.=11°; distributor speed.
Daa=650 r.p.m.=7°; 1,100 r.p.m.=11°; 1,350 r.p.m.=14°.
DR—Delco-Remy.
e—At 17" HG (mercury).
E—Engine idling.
f—At 14" HG (mercury).
fd—Timing mark on rim front dampener.
FM—Ford-Mallory.
H=.0225-.0275.
i—Delco-Remy 17-21 ozs.
L—Lucas (spark plugs—Lodge).
(L)—Plus or minus 4° on open-closed periods.
m—minimum.
(M)—Maximum vacuum advance 7½-8½ 2,000 r.p.m.
Mv—6⅛"=2°; 9"=4.5°; 12"=6°; 15"=7.5°.
Mvv=11'=3°; 15"=6°.
n—At 6.4 volts.
N—Plus or minus 3°.
NY—No vacuum control.
O—Own.
P—Per cent.
s—Plus or minus 2.
(S)—AC, or AL,44. A5.
T—Champion L-10S, K.L.G. E80, Lodge HN or HNP.
TDC—Top dead centre.
Va-Ks—AC or Champion.
Va-KK—AC or Champion.
*—"A" distributor 12B; "B" and "C" distributors 8B.
†—Plus or minus 2°.
††—AC 104, or Champion Y4A.
††a—AC 104, or Champion Y4A, or AL P-4.
(1)—Up to engine number P200, Cha L-10S.
(2)—Or Cha L-10.

ELECTRICAL SYMBOLS


SOLENOID SWITCH


FUSE


LT SWITCH (CONN. ON BACK)


CONDENSER


SNAP SPLICE CONNECTION


BATTERY


POSITIVE
NEGATIVE


CONTACTS


CAR AMMETER


VOLTMETER


POTENTIOMETER


SLIDE WIRE RESISTOR


CARBON PILE RESISTOR


CROSSED WIRES (NO CONN.)


CONNECTED WIRES


GROUND

GROUND


RADIO ANTENNA


DISTRIBUTOR BREAKER POINTS


VOLTMETER FOR TESTING


AMMETER FOR TESTING


RESISTANCE NON-INDUCTIVE


RESISTANCE INDUCTIVE


RESISTANCE WITH IRON CORE


ELECTRO-MAGNET

TC
VR
TWO-CHARGE REGULATOR
VIBRATING REGULATOR


THIRD BRUSH GENERATOR


TWO BRUSH GENERATOR


SINGLE POLE SWITCH


DOUBLE POLE SWITCH


ELECTRON


PROTON


METER MOVEMENT


AMMETER SHUNT


SPRING CLIP CONNECTION


VACUUM GAUGE


PRESSURE GAUGE


TACHOMETER


SPEEDOMETER


PUSH BUTTON SWITCH


SPARK PLUG

A-ARM.	ARMATURE
B-BAT.	BATTERY
CB	CIRCUIT BREAKER
CONN.	CONNECTION
DIST.	DISTRIBUTOR
F	FIELD
GA.	GAUGE
G-GEN.	GENERATOR
G-GD.	GROUND
HD. LT.	HEAD LIGHT
IGN.	IGNITION
LT.	LIGHT
N	NEGATIVE
Ω	OHM
P	POSITIVE - PRESSURE
PRIM.	PRIMARY
REG.	REGULATOR
R	RESISTANCE
SEC.	SECONDARY
SS.	SOLENOID SWITCH
ST.M.	STARTING MOTOR
ST.	STOPLIGHT
SW.	SWITCH
T.	TELL-TALE LIGHT
VAC.	VACUUM

CLUTCH, TRANSMISSION AND REAR AXLE

Make and Model	Year	Pedal Lash at Pedal Pad	Clutch Facing—Inside Diameter	Clutch Facing Outside Diameter	Facing—Thickness	Type of Gearing	Rear Axle—Type	Type of Gearing	No. teeth—Ring Gear	No. teeth—Pinion	Pinion Adjustment	Pinion Bearing Adjustment	Pinion Bearing in Sleeve?
ANGLIA (English)			CLUTCH			TRANS.		REAR AXLE					
Four Cylinder	'49	5/8-3/4	4.5	7.38	.1355-.1385	BI	3/4F	S	33	6	No	Y	N
Four Cylinder	'50	5/8-3/4	4.5	7.38	.135-.142	D	3/4F	S	33	6	A	Sc	N
AUSTIN (English)													
A-40	'48	1/4	—	7 1/4	—	—	3/4F	—	—	—	—	—	—
A-40 Devon & Dorset	'49	1/2	—	7 1/4	—	D	3/4F	S	38	7	Sh	A	—
A-40 Devon & Dorset	'50	1/2	5	7 1/4	1/8	D	3/4F	S	38	7	Sh	A	N
BUICK													
Spec. 44; Super 45	'41	3/4	6 1/2	10	1/8	BI	SF	H	44	10	Sh	No	N
Series 46, 47, 49	'41	3/4	6 1/2	10 1/2	1/8	BI	SF	H	39	10	Sh	No	N
Series 44	'42	3/4	6 1/2	10	1/8	BI	SF	H	44	10	Sh	No	N
Series 46	'42	3/4	6 1/2	10 1/2	1/8	BI	SF	H	39	10	Sh	No	N
Series 50	'46	3/4	6	10	.125	BI	SF	H	44	10	Sh	No	N
Series 70	'46	3/4	6 1/2	10 1/2	.125	BI	SF	H	39	10	Sh	No	N
Series 40	'47	3/4-1	6	10	.125	BI	SF	H	49	11	Sh	No	N
Series 50	'47	3/4-1	6	10	.125	BI	SF	H	49	11	Sh	No	N
Series 70	'47	3/4-1	6 1/2	10 1/2	.125	BI	SF	H	41	10	Sh	No	N
Series 40, 50, 70	'48	(Not distributed in Canada)											
Series 40, 50, 70	'49	(Not distributed in Canada)											
Series 40, 50, 70	'50	(Not distributed in Canada)											
CADILLAC													
Series 60, 61, 62, 63	'41	7/8	7	10 1/2	.137	BI	SF	H	49	13	No	No	N
Series 67, 75	'41	7/8	7	11	.137	BI	SF	H	47	11	No	No	N
Series 60, 61, 62, 63	'42	7/8	7	10 1/2	.137	BI	SF	H	49	13	No	No	N
Series 67, 75	'42	7/8	7	11	.137	BI	SF	H	47	11	No	No	N
V-8	'46	7/8	7	z	.137	BI	SF	H	47	11	No	No	N
V-8	'47	7/8-1 1/8	7	z	.137	BI	SF	SH	49†	13†	No	No	N
V-8	'48	(Not distributed in Canada)											
V-8	'49	(Not distributed in Canada)											
V-8	'50	(Not distributed in Canada)											
CHEVROLET													
Six	'41	3/4	6 1/8	9 1/8	.132	BI	SF	H	37	9	Sh	No	N
Six	'42	3/4	6 1/8	9 1/8	.132	BI	SF	H	37	9	Sh	No	N
Six	'46	1	6 1/8	9 1/8	.135	BI	SF	H	37	9	Sh	No	N
Six	'47	1	6 1/8	9 1/8	.132-.138	BI	SF	H	37	9	Sh	No	N
Six	'48	1	6 1/8	9 1/8	.137-.143	BI	SF	H	37	9	Sh	No	N
Six	'49	—	6 1/8	9 1/8	.132-.138	HE2	SF	H	37	9	Sh	No	N
Six	'50	—	6 1/8	9 1/8	.132-.138	HE2	SF	H	37	9	Sh	No	N
CHRYSLER													
Royal 6 C-28	'41	1	7	10	.125	BIO	SF	H	39	10	SS	Sh	N
Roy. Wind. C-28W	'41	1	6	9 1/4	.125	ST	SF	H	39	11	SS	Sh	N
N. Yorker 8 C-30	'41	1	6	10	.125	BIO	SF	H	43	11	SS	Sh	N
Crown Imp. C-33	'41	1	6	10	.125	BIO	SF	H	41	9	SS	Sh	N
Royal 6 C-34	'42	1	7	10	.125	BIO	SF	H	39	10	SS	Sh	N
Roy. Wind. C-34W	'42	1	6	9 1/4	.125	ST	SF	H	39	11	SS	Sh	N
New York 8 C-36	'42	1	6	10	.125	BIO	SF	H	43	11	SS	Sh	N

For key to abbreviations see page 77

CLUTCH, TRANSMISSION AND REAR AXLE

Make and Model	Year	Pedal Lash at Pedal Pad	Clutch Facing—Inside Diameter	Clutch Facing Outside Diameter	Facing—Thickness	Type of Gearing	Rear Axle—Type	Type of Gearing	No. teeth—Ring Gear	No. teeth—Pinion	Pinion Adjustment	Pinion Bearing Adjustment	Pinion Bearing in Sleeve?
CHRYSLER—(Continued)			**CLUTCH**			**TRANS.**		**REAR AXLE**					
Crown Imp. C-37	'42	1	6	10	.125	ST	SF	H	43	12	SS	Sh	N
Six, C-38S	'46	1	6	9¼	.125	EI	SF	H	39	11	SS	Sh	N
Six, C-38W	'46	1	6	9¼	.125	ST§	SF	H	39	11	SS	Sh	N
Eight, C-39, C-40	'46	1	6	10	.125	ST§	SF	H	37	11	SS	Sh	N
Six, C-38S	'47	1	6	9¼	.125	EI	SF	H	39	11	SS	Sh	N
Six, C-38W	'47	1	6	9¼	.125	ST§	SF	H	39	11	SS	Sh	N
Eight, C-39, C-40	'47	1	6	10	.125	ST§	SF	H	37	11	SS	Sh	N
Six, C-38S	'48	1	6	9¼	.125	EI	SF	H	39	11	SS	Sh	N
Six, C-38W	'48	1	6	9¼	.125	ST§	SF	H	39	11	SS	Sh	N
Eight, C-39, C-40	'48	1	6	10	.125	ST§	SF	H	37	11	SS	Sh	N
Six, C-45	'49	1	6	9¼	.125	ST§	SF	H	39R	10	SS	Sh	N
Eight, C-46, C-47	'49	1	6	9¼	.125	ST§	SF	H	43	12	SS	Sh	N
Six	'50	1	6	9¼	.125	EI-R ST§W	SF	H	39R	10	SS	SH	N
Eight	'50	1	6	9¼	.125	ST§	SF	H	43	12	SS	SH	N
CROSLEY													
CC (Up to 41547)	'47	1	4	6	⅛	s	SF	S	31	6	Sh	Sh	N
CC,CD (Up to 106039)	'48	1	4	6	⅛	s	SF	S	31	6	Sh	Sh	N
CD (After 106039)	'49	1	4	6	⅛	s	SF	S	31	6	Sh	Sh	N
Crosley	'50	1	4	6	⅛	—	SF	S	31	6	Sh	Sh	N
DE SOTO													
De Luxe S-8	'41	1	7	10	⅛	BI	SF	H	41	10	SS	Sh	N
Cus. S-8 (Fluid Dr.)	'41	1	6	9¼	⅛	ST§	SF	H	39	11	SS	Sh	N
Cus. S-10 (Fl. Dr.)	'42	1	6	9¼	⅛	ST§	SF	H	39	11	SS	Sh	N
S-11	'46	1	6	9¼	.125	ST§	SF	H	41	11	SS	Sh	N
S-11	'47	1	6	9¼	.125	ST§	SF	H	41	11	SS	Sh	N
S-11	'48	1	6	9¼	.125	ST§	SF	H	41	11	SS	Sh	N
S-13 Custom	'49	1	6	9¼	.125	ST§	SF	H	39	10	SS	Sh	N
S14	'50	1	6	9¼	.125	ST§	SF	H	39	10	SS	Sh	N
DODGE													
Kingsway 6 D-20	'41	1	6	9¼	.125	EI	SF	H	41	10	SS	Sh	N
De Luxe 6 D-21	'41	1	6	9¼	.125	EI	SF	H	41	10	SS	Sh	N
Lux. Liner D-19	'41	1	7	10	.125	BI	SF	H	41	10	SS	Sh	N
De Luxe D-23	'42	1	6	9¼	.125	EI	SF	H	39	10	SS	Sh	N
Custom D-22	'42	1	6	9¼	.125	EI	SF	H	41	10	SS	Sh	N
D-25	'46	1	6	9¼	.125	EI	SF	H	39	10	SS	Sh	N
D-24	'46	1	6	9¼	.125	EI	SF	H	39a	10	SS	Sh	N
D-25	'47	1	6	9¼	.125	EI	SF	H	39	10	SS	Sh	N
D-24	'47	1	6	9¼	.125	EI	SF	H	39a	10	SS	Sh	N
D-25	'48	1	6	9¼	.125	EI	SF	H	39	10	SS	Sh	N
D-24	'48	1	6	9¼	.125	EI	SF	H	39a	10	SS	Sh	N
D-30	'49	1	6	9¼	.125	EI	SF	H	41(s)	10	SS	Sh	N
D-31, D-32	'49	1	6	9¼	.125	EI	SF	H	39	10	SS	Sh	N
D34-D35-D36	'50	1	6	9¼	.125	EI	SF	H	41¢	10¢	Sh	Sh	N
FORD													
V-8 85	'41	1	5.76	9	.137	BI	¾F	S	34	9	No	SS	N
V-8 85	'42	1	5.76	9	.137	BI	¾F	S	34	9	No	SS	N

(Continued on page 72)

For key to abbreviations see page 77

CLUTCH, TRANSMISSION AND REAR AXLE

Make and Model	Year	Pedal Lash at Pedal Pad	CLUTCH: Clutch Facing—Inside Diameter	CLUTCH: Clutch Facing Outside Diameter	CLUTCH: Facing—Thickness	TRANS.: Type of Gearing	REAR AXLE: Rear Axle—Type	REAR AXLE: Type of Gearing	REAR AXLE: No. teeth—Ring Gear	REAR AXLE: No. teeth—Pinion	REAR AXLE: Pinion Adjustment	REAR AXLE: Pinion Bearing Adjustment	REAR AXLE: Pinion Bearing in Sleeve?
FORD—(Continued)													
De Luxe	'46	1½	6¾	10	.125	BI	¾F	S	34	9	—	PA	Y
Super De Luxe	'46	1½	6¾	10	.125	BI	¾F	S	34	9	—	PA	Y
De L. & Super De L.	'47	1½	6¾	10	.125	BI	¾F	S	34	9	No	PA	Y
De L. & Super De L.	'48	1½	6¾	10	.125	BI	¾F	S	34	9	No	PA	Y
V-8	'49	—	6	9½	⅛	BI	Hyp SF	H	41	11	Sh	Sh	N
V-8	'50	1¼	6.00	9.50	.125	BI	¾F	HG	41	11	Sh	.22-28	—
FRAZER													
F-47	'47	¾-1¼	6	9¼	⅛	HE	Hyp-SF	SB	41	11	Sh	Sh	N
F-47-47C-485-486	'48	¾-1	6	9¼	⅛	C	SF	HyB	f	ff	Sh	Sh	N
Series F-495, 496	'49	⅝-¾	6	9¼	⅛	EI	SF	HyB	RP	RP	Sh	Sh	N
Series F-495, 496	'50	⅝-¾	6	9¼	⅛	EI	SF	HyB	RP	RP	Sh	Sh	N
HILLMAN MINX (English)													
Mark III	'49	¾	4.88	7.13	—	—	SF	S	47	9	HM	ShX	N
Mark IV	'50	⅝	4.88	7.13	3/16	hm	SF	SB	—	—	Sh	Sh	N
HUDSON													
Six-10	'41	1½	5¼	8 11/16	13/64	BI	SF	S	41	9	Sh	Sh	N
Six-10*	'41	1½	6⅜	9 13/16	13/64	BIO	SF	S	41	9	Sh	Sh	N
Six-11, 12	'41	1½	5¼	8 11/16	13/64	BI	SF	S	37	9	Sh	Sh	N
Six-11*, 12*, 18	'41	1½	6⅜	9 13/16	13/64	BIO	SF	S	37	9	Sh	Sh	N
Eight	'41	1½	6⅜	9 13/16	13/64	BIO	SF	S	37	9	Sh	Sh	N
"6"—20 Sp.	'42	1½	5¼	8 11/16	13/64	BI	SF	S	41	9	Sh	Sh	N
"6"—Sp.*	'42	1½	6⅜	9 13/16	13/64	BIO	SF	S	41	9	Sh	Sh	N
"6"—20P, 21, 22	'42	1½	5¼	8 11/16	13/64	BI	SF	S	37	9	Sh	Sh	N
"6"—20P*, 21*, 22*	'42	1½	6⅜	9 13/16	13/64	BIO	SF	S	37	9	Sh	Sh	N
"8"—24, 25, 27	'42	1½	6⅜	9 13/16	13/64	BIO	SF	S	37	9	Sh	Sh	N
Six-51, 52	'46	1½	5¼*	9*	13/64	BI	SF	S	37	9	Sh	Sh	N
Eight-53, 54	'46	1½	6⅜	10	13/64	BIO	SF	S	37	9	Sh	Sh	N
Six—171, 172	'47	1½	5¼*	9*	13/64	BI	SF	S	37	9	Sh	Sh	N
Eight—173, 174	'47	1½	6⅜	10	13/64	BIO	SF	S	37	9	Sh	Sh	N
Series 481, 482	'48	1½	6.375	9.8125	.203	SM	SF	H	41	10	Sh	Sh	N
Series 483, 484	'48	1½	6.375	9.8125	.203	SM	SF	H	41	10	Sh	Sh	N
Series 491, 492	'49	1½	6.375	9.8125	.203	SM	SF	H	41	10	Sh	Sh	N
Series 493, 494	'49	1½	6.375	9.8125	.203	SM	SF	H	41	10	Sh	Sh	N
Series 500-504	'50	1½	6.375	9.8125	.203	SM	SF	HYP	41	10	Sh	Sh	N
HUMBER HAWK (English)													
Super Snipe Mark II	'48	¾	6.00	10	¼	hm	SF	SB	—	—	Sh	Sh	N
Mark III	'49	.75	5.75	8	—	—	SF	HyB	—	—	—	—	—
Super Snipe Mark II	'49	¾	6.00	10	¼	hm	SF	SB	—	—	Sh	Sh	N
Pullman Mark II	'49	¾	6.00	10	¼	hm	SF	SB	—	—	Sh	Sh	N
Hawk Mark III	'49	¾	5.75	8	3/16	hm	SF	HG	—	—	Sh	Sh	N
Hawk Mark III	'50	¾	5.75	8	3/16	hm	SF	HG	—	—	Sh	Sh	N
Pullman Mark II	'50	¾	6.00	10	¼	hm	SF	SB	—	—	Sh	Sh	N
Super Snipe Mark II	'50	¾	6.00	10	¼	hm	SF	SB	—	—	Sh	Sh	N

For key to abbreviations see page 77

CLUTCH, TRANSMISSION AND REAR AXLE

Make and Model	Year	Pedal Lash at Pedal Pad	Clutch Facing—Inside Diameter	Clutch Facing Outside Diameter	Facing—Thickness	Type of Gearing	Rear Axle—Type	Type of Gearing	No. teeth—Ring Gear	No. teeth—Pinion	Pinion Adjustment	Pinion Bearing Adjustment	Pinion Bearing in Sleeve?
JAGUAR (English)			**CLUTCH**			**TRANS.**		**REAR AXLE**					
1½ Litre Saloon	'46-'48	1	6⅛	8⅞	—	J	¾F	HG	39	8	Sh	Sh	—
2½ Ltre. S&C	'46-'48	1	6⅛	8⅞	—	J	¾F	HG	50	11	Sh	Sh	—
3½ Litre S&C	'46-'48	1	6¾	9⅞	—	J	¾F	HG	47	11	Sh	Sh	—
2½ Ltre. S&C Mk.V	'49	1	6⅛	8⅞	—	J	¾F	HG	50	11	Sh	Sh	—
3½ Ltre S&C. Mk.V	'49	1	6¾	9⅞	—	J	¾F	HG	47	11	Sh	Sh	—
3½ Ltre. XK.120 S.S.	'49	1	6¾	9⅞	—	J	¾F	HG	51	14	Sh	Sh	—
KAISER													
K-100	'47	3¼-1¼	6	9¼	⅛	HE	Hyp SF	SB	41	11	Sh	Sh	N
K-100-101-481-482	'48	¾-1	6	9¼	⅛	C	SF	HyB	f	ff	Sh	Sh	N
Series K-491, 492	'49	⅝-¾	6	9¼	⅛	EI	SF	HyB	RP	RP	Sh	Sh	N
K-491, 492	'50	⅝-¾	6	9¼	⅛	EI	SF	HyB	RP	RP	Sh	Sh	N
LINCOLN													
Linc. & Linc. Cont.	'41	1½	6.75	10	.137	BI	¾F	H	40	9	No	Sh	N
Linc. & Linc. Cont.	'47	1¾	6¾	10	.125	BI	¾F	H	40	9	No	PC	Y
Linc. & Linc. Cont.	'48	1¾	6¾	10	.125	BI	¾F	H	40	9	No	PC	Y
Linc. & Linc. Cont.	'49	(Not distributed in Canada)											
Linc.,Linc.Cont.	'50	(Not distributed in Canada)											
MERCURY													
Mercury	'41	1	6.75	10	.125	BI	¾F	S	39	11	No	SS	N
Mercury	'42	1	6.75	10	.125	BI	¾F	S	39	11	No	SS	N
114 & 114X	'46	1½	6¾	10	.125	BI	¾F	S	34	9	No	PB	Y
118	'46	1½	6¾	10	.125	BI	¾F	S	39	11	No	PB	Y
114, 114X, & 118	'47	1½	6¾	10	.125	BI	¾F	S	34	9	No	PA	Y
114, 114X, & 118	'48	1½	6¾	10	.125	BI	¾F	S	34	9	No	PA	Y
Mercury	'49	—	6¾	10	⅛	BI	HypSF	H	43	11	Sh	Sh	N
Mercury	'50	1¼	6.75	10	.125	BI	¾F	HG	43	11	Sh	—	—
METEOR													
Meteor	'49	—	6	9.5	⅛	BI	HypSF	H	41	11	Sh	Sh	N
Meteor	'50	1¼	6	9.5	.125	BI	¾F	HG	41	11	Sh	22-28	—
MG (English)													
T.C.	'48	¾-1	5.0	7.25	.13	SM	¾F	S	—	—	—	—	—
Series Y	'49	¾-1	5.0	7.25	.13	SM	¾F	S	36	7	—	—	—
Series TD	'50	1	5.0	7.25	.13	sm	SF	Hyl	41	8	Sh	Sh	N
Series Y	'50	1	5.0	7.25	.13	sm	¾F	S	36	7	—	—	—
MONARCH													
V-8	'46	1½	6¾	10	.125	BI	¾F	S	34	9	No	P	Y
V-8	'47	1½	6¾	10	.125	BI	¾F	S	34	9	No	P	Y
V-8	'48	1½	6¾	10	.125	BI	¾F	S	34	9	No	P	Y
V-8	'49	—	6¾	10	⅛	BI	HypSF	H	43	11	Sh	Sh	N
V-8	'50	1¼	6¾	10	.125	BI	¾F	HG	43	11	Sh	—	—

For key to abbreviations see page 77

CLUTCH, TRANSMISSION AND REAR AXLE

Make and Model	Year	Pedal Lash at Pedal Pad	Clutch Facing—Inside Diameter	Clutch Facing Outside Diameter	Facing—Thickness	Type of Gearing	Rear Axle—Type	Type of Gearing	No. teeth—Ring Gear	No. teeth—Pinion	Pinion Adjustment	Pinion Bearing Adjustment	Pinion Bearing in Sleeve?
MORRIS (English)			CLUTCH			TRANS.		REAR AXLE					
Minor	'48	3/4	4.25	6.25	.125	sm	SF	Hy	41	9	Sh	Sh	N
Oxford	'48	1	5.00	7.25	.13	sm	SF	Hy	M	M	Sh	Sh	N
8 Series E	'49	3/4-1	—	—	—	SM	3/4F	S	37	7	Sh	—	—
10 Series M	'49	3/4-1	—	—	—	SM	3/4F	S	37	7	N	—	—
Six	'49	1	6.13	9.15	.15	sm	SF	Hy	41	10	Sh	Sh	N
Minor	'49	3/4	4.25	6.25	.125	sm	SF	Hy	41	9	Sh	Sh	N
Oxford	'49	1	5.00	7.25	.13	sm	SF	Hy	M	M	Sh	Sh	N
Minor	'50	3/4	4.25	6.25	.125	sm	SF	Hy	41	9	Sh	Sh	N
Six	'50	1	6.13	9.15	.15	sm	SF	Hy	41	10	Sh	Sh	N
Oxford	'50	1	5.00	7.25	.13	sm	SF	Hy	M	M	Sh	Sh	N
NASH													
Ambassador 600	'41	1	5 3/8	8	1/8	BI	SF	H	37	9	Sh	Sh	N
Ambassador 6	'41	1	7	10	.133	BI	SF	H	41	10	Sh	Sh	N
Ambassador 8	'41	1	7	10	.133	BI	SF	H	41	10	Sh	Sh	N
4240—"6"	'42	1	5 3/8	8	1/8	BI	SF	H	37	9	Sh	Sh	N
4260—"6"	'42	1	7	10	1/8	BI	SF	H	41	10	Sh	Sh	N
4280—"8"	'42	1	7	10	1/8	BI	SF	H	41	10	Sh	Sh	N
Series 4640	'46	1	5 1/4	7 7/8	—	BI	SF	H	37	9	Sh	Sh	N
Series 4660	'46	1	7	10	.133	BI	SF	H	41	10	Sh	Sh	N
Series 4740	'47	1	5 3/8	8	—	BI	SF	H	37	9	Sh	Sh	N
Series 4760	'47	1	7	10	—	BI	SF	H	41	10	Sh	Sh	N
Series 4840	'48	1/2-1 1/4	5 1/4	8	5/32	EI	SF	H	37	9	Sh	Sh3	—
Series 4860	'48	1/2-1 1/4	7	10	5/32	EIO*	SF	H	41	10	Sh	Sh3	—
Series 4940	'49	—	5 3/8	8	1/8	EI	SF	H	35	8	Sh	Sh	N
Series 4960	'49	—	7	10	1/8	EI	SF	H	41	10	Sh	Sh	N
Canadian Statesman	'50	1/2-3/4	5 3/8	8	1/8	HE	SF	H	40	9	Sh	Sh	N
Statesman (U.S.)	'50	1/2-3/4	—	—	1/8	EI	SF	H	35n	8n	Sh	Sh	N
Ambassador (U.S.)	'50	1/2-3/4	7	10	1/8	EI	SF	H	41nn	10nn	Sh	Sh	N
Rambler (U.S.)	'50	1/2-3/4	—	—	1/8	EI	SF	H	34r	9r	Sh	Sh	N
OLDSMOBILE													
Six	'41	1	6	9 1/4	1/8	BI	SF	H	43	10	Sh	No	N
Eight	'41	1	7	10	1/8	BI	SF	H	41	10	Sh	No	N
Six	'42	1	6	9 1/4	1/8	BI	SF	H	43	10	Sh	No	N
Eight	'42	1	7	10	1/8	BI	SF	H	41	10	Sh	No	N
Six	'46	1	6	9 1/4	.125	BI	SF	H	43	10	Sh	No	N
Eight	'46	1	7	10	.125	BI	SF	H	41	10	Sh	No	N
Six	'47	3/4-1	6	9 1/4	.125	BI & HT	SF	H	**	**	Sh	@	—
Eight	'47	3/4-1	7	10	.125	BI & HT	SF	H	**	**	Sh	@	—
Six	'48	3/4-1	6	9 1/4	.125	BI & HT	SF	H	**	**	Sh	@	—
Eight	'48	3/4-1	7	10	.125	BI & HT	SF	H	**	**	Sh	@	—
Six	'49	—	7	10	.125	—	SF	H	41	10	Sh	@	N
Eight	'49	—	—	—	—	—	SF	H	42	13	Sh	@	N
Six ("76")	'50	—	7	10	.125	—	SF	H	41	10	Sh	Nut	N
Eight ("88")	'50	—	7	10.5	.137	—	SF	H	40	11	Sh	Nut	N
PACKARD													
110	'41	1 1/2	6	9 1/2	.125	BI	SF	H	43	10	Sh	—	N
120	'41	1 1/2	6	10	.125	BI	SF	H	45	11	Sh	—	N
Super 8	'41	1 3/4	6 1/2	11	125	BI	SF	H	x	y	Sh	—	N

For key to abbreviations see page 77

CLUTCH, TRANSMISSION AND REAR AXLE

Make and Model	Year	Pedal Lash at Pedal Pad	Clutch Facing—Inside Diameter	Clutch Facing Outside Diameter	Facing—Thickness	Type of Gearing	Rear Axle—Type	Type of Gearing	No. teeth—Ring Gear	No. teeth—Pinion	Pinion Adjustment	Pinion Bearing Adjustment	Pinion Bearing in Sle
PACKARD—(Continued)			CLUTCH			TRANS.		REAR AXLE					
"6"—2000	'42	1½	6	9½	.125	Sel	SF	H	43	10	Sh	—	N
"8"—2001	'42	1½	6	10	.125	Sel	SF	H	41	10	Sh	—	N
Super "8"—2003, 6	'42	1¾	6⅝	11	.125	Sel	SF	H	47	12	Sh	—	N
2100	'46	1½-2	6	9½	.125	H	SF	HG	43	10	—	—	—
2101 & 2111	'46	1½-2	6	10	.125	H	SF	HG	41	10	—	—	—
2103	'46	1¾-2¼	6⅝	11	.125	H	SF	HG	47	12	—	—	—
2126	'46	1¾-2¼	6⅝	11	.125	H	SF	HG	45	11	—	—	—
2100	'47	1½-2	6	9½	.125	HE	SF	HG	43	10	.003-.005		N
2101 & 2111	'47	1½-2	6	10	.125	HE	SF	HG	41	10	.003-.005		N
2103, 2106 & 2126	'47	1¾-2¼	6⅝	11	.125	HE	SF	HG	47	12	.003-.005		N
2130	'47	1¾-2¼	6⅝	11	.125	HE	SF	HG	47	12	.003-.005		N
2201, 2211	'48	1¼-1½	6¾	10	.125	Sel	SF	HG	39	10	.003-.005		PD
2202, 2232	'48	1¼-1½	7	10½	.125	Se	SF	HG	39	10	.003-.005		PD
2206, 2233	'48	1¼-1½	7	11	.125	Se	SF	HG	47	12	.003-.005		PD
2301	'49	1¼-1½	6¾	10	.125	U	SF	HG	39	10	No	PD	N
2302, 2332	'49	1¼-1½	7	10½	.125	U	SF	HG	39	10	No	PD	N
2306, 2333	'49	1¼-1½	7	11	.125	U	SF	HG	39	11	No	PD	N
2301	'50	1¼-1½	6¾	10	.125	U	SF	HG	39	10	No	PD	N
2302, 2332	'50	1¼-1½	7	10½	.125	U	SF	HG	39	10	No	PD	N
2306, 2333	'50	1¼-1½	7	11	.125	U	SF	HG	39	11	No	PD	N
PLYMOUTH													
Roadking P-11	'41	1	6	9¼	.125	BI	SF	H	41	10	SS	Sh	N
De Luxe P-12	'41	1	6	9¼	.125	BI	SF	H	41	10	SS	Sh	N
De Luxe P-14	'42	1	6	9¼	.125	EI	SF	H	39	10	SS	Sh	N
P-15	'46	1	6	9¼	.125	EI	SF	H	39	10	SS	Sh	N
P-15	'47	1	6	9¼	.125	EI	SF	H	39	10	SS	Sh	N
P-15	'48	1	6	9¼	.125	EI	SF	H	39	10	SS	Sh	N
P-17, P-18	'49	1	6	9¼	.125	EI	SF	H	39	10	SS	Sh	N
P-19, P-20	'50	1	6	9¼	.125	EI	SF	H	39	10	SS	Sh	N
PONTIAC													
Fleetleader	'41	⅞	6	9⅛	⅛	BI	SF	H	37	9	Sh	No	N
Torpedo 6	'41	⅞	6	9⅛	⅛	BI	SF	H	43	10	Sh	No	N
Fleetleader 6	'42	⅞	6	9⅛	⅛	BI	SF	H	39	10	Sh	No	N
Torpedo 6 & De L	'42	⅞	6	9⅛	⅛	BI	SF	H	43	10	Sh	No	N
Six	'46	—	6	9½	.125	BI	SF	H	—	—	Sh	No	N
Eight	'46	—	6	9½	.125	BI	SF	H	—	—	Sh	No	N
Six	'47	1	6	9½	.125	SM	SF	H	❖	❖	Sh	@	—
Eight	'47	1	6	9½	.125	SM	SF	H	❖	❖	Sh	@	—
Six	'48	1	6	9½	.125	SM	SF	H	❖	❖	Sh	@	—
Eight	'48	1	6	9½	.125	SM	SF	H	❖	❖	Sh	@	—
Six 2000, 2200, 2500	'49	—	6	9½	⅛	HE2	SF	H	41(p)	10	No	Sc	N
Eight	'49	—	6	9½	⅛	HE2	SF	H	41	10	Sh	Sc	N
Six 2000, 2200, 2500	'50	—	6	9.5	⅛	HE2	SF	H	41	10	Sh	Sc	N
Eight-2700	'50	—	6¾	10	⅛	HE2	SF	H	39	10	Sh	Sc	N
PREFECT (English)													
Four Cylinder	'49	⅝-¾	4½	7.38	.1355-.1385	BI	¾F	S	33	6	No	Y	N
Four Cylinder	'50	⅜-¾	4.50	7.38	.132-.142	D	¾F	S	33	6	A	Sc	N

N.B. Fleetleaders (1941-2-6-7-8) are 20 and 22 Series; Torpedo 6 & 8 (1941-2-6-7-8) are 25 and 27 Series respectively. Streamliner 6 & 8 (1941-2-6-7-8) are 26 and 28 Series respectively; Streamliner 6 & 8 (1948) not distributed in Canada.

For key to abbreviations see page 77

CLUTCH, TRANSMISSION AND REAR AXLE

Make and Model	Year	Pedal Lash at Pedal Pad	Clutch Facing—Inside Diameter	Clutch Facing Outside Diameter	Facing—Thickness	Type of Gearing	Rear Axle—Type	Type of Gearing	No. teeth—Ring Gear	No. teeth—Pinion	Pinion Adjustment	Pinion Bearing Adjustment	Pinion Bearing in Sleeve
RILEY (English)			CLUTCH			TRANS.		REAR AXLE					
100 hp. 2½-Litre	'49	¾-1	6.75	9.87	.14	SM	SF	S	—	—	—	—	—
1½ Litre	'46-'50	¾	5.25	8.00	.125	smJ	SF	S	44	9	—	—	—
2½ Litre	'47-'50	¾	6.75	9.87	.14	J	SF	S	37	9	—	—	—
ROVER (English)													
75	'49	¾	—	9	—	Ro	SF	S	47	10	Sh	Sh	—
75	'50	.75	6.125	9	.375	HE	SF	S	43	10	Sh	Sh	N
Land Rover	'50	.75	6.125	9	.330	HE	SF	S	47	10	Sh	Sh	Y
STUDEBAKER													
Commander 6-11A	'41	1	6	9¼	⅛	BI	SF	H	50	11	Sh	Sh	N
President 8-7C	'41	1	6	9½	⅛	BI	SF	H	50	11	Sh	Sh	N
Champion 6-3G	'41	1	5⅛	7⅞	⅛	BI	SF	H	41	9	Sh	Sh	N
Commander 6-12A	'42	1	6	9¼	⅛	BI	SF	H	45	11	Sh	Sh	N
President 8-8C	'42	1	6	9½	⅛	BI	SF	H	45	11	Sh	Sh	N
Champion 6-4G	'42	1	5⅛	7⅞	⅛	BI	SF	H	41	10	Sh	Sh	N
Skyway, 5G	'46	1	5⅛	7⅞	⅛	BI	SF	H	41	10	Sh	Sh	N
Champion 6G	'47	1	5⅜	8	⅛	SM	SF	H	41	10	Sh	Sh	N
Commander 14A	'47	1	6	9¼	⅛	SM	SF	H	45	11	Sh	Sh	N
Champion 7G	'48	½-1	5⅜	8	.125	HE	SF	H	41	10	Sh	Sh	N
Commander 15A	'48	½-1	6	9¼	.125	HE	SF	H	45	11	Sh	Sh	N
Champion 8-G	'49	¾-1	5⅜	8	.125	HE	SF	H	41	10	Sh	Sh	N
Commander 16-A	'49	¾-1	6	9¼	.125	HE	SF	H	45	11	Sh	Sh	N
Champion 9G	'50	¾-1	5⅜	8	⅛	SM	SF	H	41	10	Sh	Sh	N
Commander 17A	'50	¾-1	6	9¼	⅛	SM	SF	H	45	11	Sh	Sh	N
SUNBEAM TALBOT (English)													
90	'49	—	—	9	—	—	SF	S	—	—	—	—	—
90	'50	¾	6.13	9.16	¼	h-n	SF	SB	—	—	Sh	Sh	N
TRIUMPH (English)													
Series TRD (1800)	47-48	5-8	—	—	5/32	SM	SF	H	—	—	—	—	—
Series TRA	'49	1-2	—	—	5/32	SM	H	H	—	—	—	—	—
VANGUARD (English)													
Sedan & Est. Car	'49	⅝	6.12	9.15	.150	BI	H	SF	37	8	Sh	—	—
Sedan & Est. Car	'50	⅝	6.12	9.15	.150	BI	H	SF	37	8	Sh	—	—
VAUXHALL LIP (English)													
Velox	'49	1	5¾	8	⅛	BI	SF	S	33	8	Sh	Y	N
Velox	'50	1	5¾	8	⅛	BI	SF	S	33	8	Sh	Y	N
WILLYS													
Willys Americar	'41	¾	5⅛	7⅞	⅛	BI	SF	H	40	9	Sh	Sh	N
CJ-2A	'49	1¼	5⅛	8½	.132	HE	SF	H	43	8	Sh	Sh	N
2WD & 4WD	'49	¾	5⅛	8½	.132	HE	SF	SB	43	8	Sh	Sh	N
4-63 & 6-63	'49	¾	5⅛	8½	.132	HE	SF	H	43w	8	Sh	Sh	N
CJ-3A	'49	1¼	5⅛	8½	.132	HE	SF	H	43	8	Sh	Sh	N
4-73 Sta. Wgn.	'50		5⅛	8½	.132-.138	HE	SF	H	43	8	Sh	Sh	N

For key to abbreviations see page 77

CLUTCH, TRANSMISSION AND REAR AXLE

Make and Model	Year	Pedal Lash at Pedal Pad	Clutch Facing—Inside Diameter	Clutch Facing Outside Diameter	Facing—Thickness	Type of Gearing	Rear Axle—Type	Type of Gearing	No. teeth—Ring Gear	No. teeth—Pinion	Pinion Adjustment	Pinion Bearing Adjustment	Pinion Bearing in Sleeve
WILLYS—(Continued)			CLUTCH			TRANS.		REAR AXLE					
4x4-63 Sta. Wgn.	'50	—		8½			SF	H					
6-73 Sta. Wgn.	'50	—	5⅛	8½	.132-.138	HE	SF	H	43	8	Sh	Sh	N
4-73 VJ Jeepster	'50	—	5⅛	8½	.132-.138	HE	SF	H	41	9	Sh	Sh	N
6-73 VJ Jeepster	'50	—	8½	8½	.132-.138	HE	SF	H	41	9	Sh	Sh	N
WOLSELEY (English)													
Four-Fifty	'49	¾-1	5.75	8.00	.125	SM	—	—	—	—	—	—	—
Six-Eighty	'49	¾-1	6.13	9.15	.15	SM	—	—	—	—	—	—	—
Six-Eighty	'48-'50	1	6.13	9.15	.15	sm	SF	H	41	10	Sh	Sh	N
Four-Fifty	'48-'50	1	5.75	8.00	.125	sm	SF	H	41W	9W	Sh	Sh	N

ABBREVIATIONS

a—Seven passenger sedan, 43 teeth in ring gear.
@—Controlled by adjustment of pinion flange retaining nut which must be tightened until pre-load friction to turn pinion is 27 to 35 inch pounds.
A—Preload 6-8 pounds.
BI—Constant mesh helical gears with synchronous meshing of 2nd and 3rd gears. (Ford products not constant mesh gears).
BIO—Constant mesh helical gears with synchronous meshing of 2nd and 3rd gears and overdrive.
BIO*—Constant mesh helical gears with synchronous meshing of 2nd and 3rd gears and overdrive. Optional at extra cost.
c—D34, 7 pass. sedan 43 teeth ring gear, 10 pinion. D35, D36, 39 teeth ring gear, 10 pinion.
C—Conventional.
D—Constant mesh helical gears on forward speeds.
E—Constant mesh helical gears on 2nd.
EI—Constant mesh helical gears on 2nd, with synchronous meshing of 2nd and 3rd gears.
EIO*—Constant mesh helical gears on 2nd, synchronous meshing of 1st, 2nd and 3rd with overdrive. Optional at extra cost.
f—3.73-1.41; 4.09-1.45; 4.27-1.47.
ff—3.73-1.11; 4.09-1.11; 4.27-1.11.
¾F—Three quarters floating.
hm—Constant mesh 2nd, 3rd, 4th, Synchro 2nd, 3rd, 4th.
H—Hypoid.
HE—Helical.
HE2—Constant mesh gears on second. All gears helical. Synchromeshing of 2nd and 3rd.
HG—Hypoid gears, final drive.
Hy1—Hypoid 1" offset.
HM—Pinion adjustment—.006 backlash.
HT—Hydra-matic drive.
HyB—Hypoid bevel.
Hyp SF—Hypoid, semi-floating.
J—Constant mesh helical with synchromesh 2nd, 3rd and top.
m—41 teeth ring gear up to chassis no. 36901 RHD, 40942 LHD, 39 teeth after.
M—9 teeth in pinion up to chassis no. 36901 RHD, 40942 LHD, 8 Teeth after.
n—Overdrive (optional) 39 teeth ring gear, 8 pinion.
nn—Overdrive (optional) 40 teeth ring gear, 9 pinion, Hydra-matic 39 ring, 11 pinion.
N—No.
O—Overdrive.
(p)—39 teeth on series 2000, 2200.
P—Herringbone gears on 2nd.
PA—Preload 12-16 inch pounds.
PC—Preload 18-20 pounds.
r—Overdrive optional.
R—Royal; Windsor 41 ring, 11 pinion.
RP—4.27[51]; 4.09[51]; 3.73[51]; 3.91[51]; 4.55[51].
s—Spur gear.
sm—Synchromesh 2nd, 3rd and top.
(s)—D30, 7 passenger sedan, ring 43, pinion 10.
S—Spiral bevel.
SB—Spiral bevel worm-hypoid.
Sc—Screw.
Sel—Selective silent synchronized.
SF—Semi-floating.
Sh—Shim.
Sh[3]—Shims .003 preload.
ShX—Shims 2 inch pounds preload.
SH—Spiral hypoid
SM—Synchro-mesh helical gears.
SS—Shims for axial position; spacer for preloading.
ST—Hydraulically operated 4-speed transmission helical gears on all speeds. (§ Simplimatic).
U—Unimesh.
w—Model 463, VJ-2, has 39 tooth ring gear.
W—41 teeth ring gear to chassis 5351 RHD and 6640 LDH; 39 after. 9 teeth pinion and 8 after.
x—Models 1903, 1906-47; Models 1904, 1907-45; Models 1905, 1908-48.
y—Models 1903, 1906-12; Models 1904, 1907-11; Models 1905 1908-11.
Y—Yes.
*—Series 51, 52 with overdrive, vacumotive drive and Hudson Drive Master-6⅜x10.
**—No. Teeth=Oldsmobile (6);

Ring Gear	Pinion	
41	10	3500 series except H.T.
43	10	7600 series except H.T.
40	11	7600 series H.T.
41	12	3500 series H.T.

No. Teeth Oldsmobile (8);

Ring Gear	Pinion	
43	10	78, 98 series except H.T.
40	11	98 series H.T.
41	12	78 series H.T.

†—Standard equipment 61, 62 and 60S. 75-economy axle 47 and standard equipment 75 and 75 commercial.
❖—No. teeth, ring gear 39 (Series 2000-2200); 41 (Series 2500-2700); 43 (Series 1600, 2800).
❖❖—No. teeth, pinion-10 (Series 2000, 2200, 2500, 2700) std.; 10 (series 2600, 2800) std.

BATTERY SERVICE

THE BATTERY is part of an electrical system which must be properly adjusted to provide dependable performance. There are many factors which can change the balance of the electrical system sufficiently to result in starting failure or short battery life.

Efficient battery service consists of regular service operations, and the use of especially designed equipment.

Periodic inspection of battery condition will detect electrical trouble before serious difficulty is experienced. Prevention of trouble, and early diagnosis of the cause of trouble and its prompt correction, are most readily achieved through the use of the proper equipment.

A good battery service plan, properly executed, will result in more battery recharges and new battery sales, and in customer satisfaction through uninterrupted service.

BATTERY SERVICE PLAN

	REQUIRED CONDITION	DETERMINATION OF CONDITION: TEST	DETERMINATION OF CONDITION: WARNING SIGNAL	REMEDY
BATTERIES IN NEW STOCK	Well Charged	Periodic check of electrolyte gravity	Gravity low —insufficient charging	Maintain full charge with trickle charger or Recharge regularly with series charger
	Fully Charged for Installation in service	Check electrolyte gravity	Gravity low —insufficient charging	Recharge with fast charger or series charger
BATTERIES IN SERVICE	Well Charged	Periodic check of electrolyte (a) gravity (b) level	Gravity low —insufficient charging	Recharge with fast charger or series charger
	Proper electrolyte level		Level low —too much charging (or leakage)	Check capacity with battery tester Repair as required Replace if worn out Check and correct all other parts of the electrical system
	Each part of electrical system operating within manufacurer's specifications	Check electrical sysiem (a) regularly (b) when any electrical trouble occurs	Battery near end of life	Replace the battery
			any part of electrical system in poor condition	Repair or replace inoperative parts

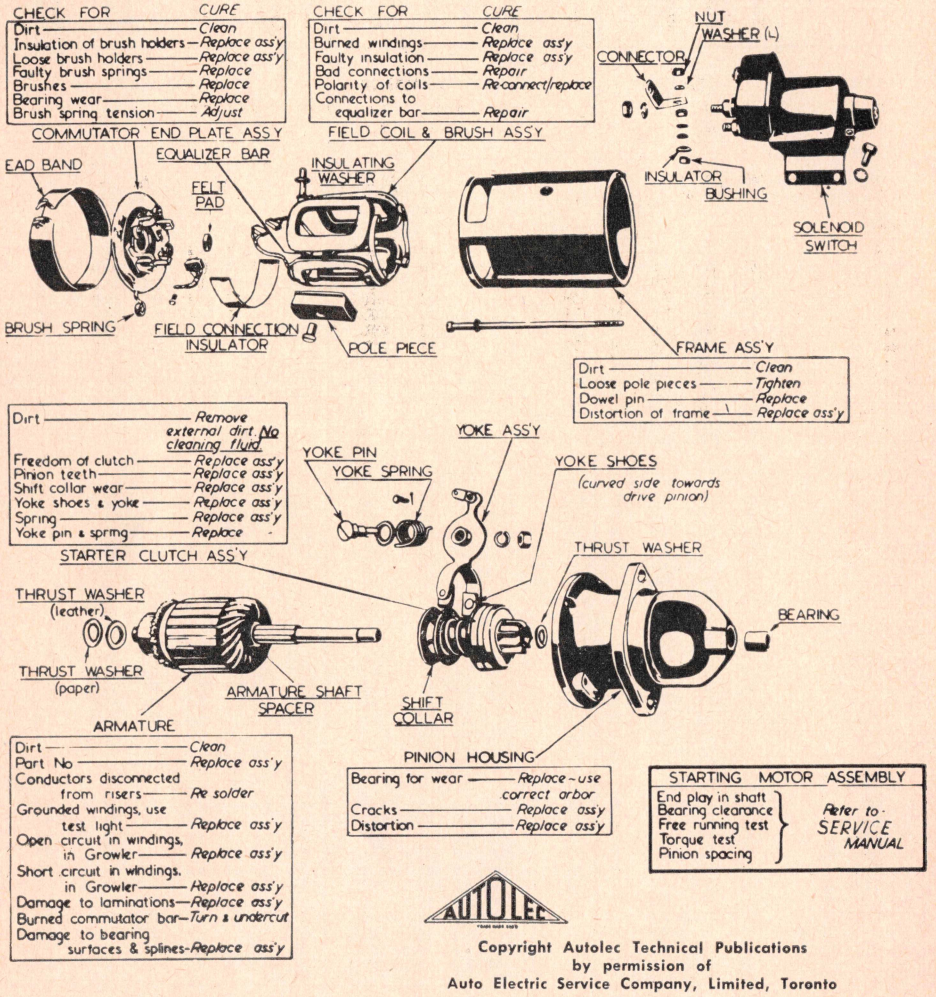
BATTERY, STARTING MOTOR AND GENERATOR

Make and Model	Year	Battery—Amp. Hr. Capacity	Bench Charging Rate—Finish	Terminal Grounded	Starting Motor—Make	Lock Test—Amp. Draw	Lock Test—Volts	Lock Test—Torque (ft.-lbs.)	Drive Type	Generator—Make	Cutout Relay—Volts to Close	Cutout Relay—Amps. to open	Type Generator Regulation	Maximum Charging Rate—Amps.	Maximum Charging Rate—Volts
ANGLIA (English)		BATTERY			STARTING MOTOR					GENERATOR					
Four Cylinder	'49	82	—	P	O	500	4.0	9	Bend	O	7.2-7.9	3.0	VR	26.3	7.0
Four Cylinder	'50	87	6.0	P	L	575	4.0	9	Man	L	6.5	—	VR	26.3	7.0
AUSTIN (English)															
A.40 Devon & Dorset	'48	51-10	6.0	P	L	335	8.0	9.3	Man	L	12.7-13.3	—	VR	—	—
A.10 Devon & Dorset	'50	51-10	5.0	P	L	300-350	8.0	9.3	Man	L	—	—	VR	—	—
BUICK															
Spec. 40; Super 50	'41	120	7.0	N	DR	525	3.37	12	ORC	DR	6.2-6.7	0-4	RC	34.0	8.0
Series 60, 70	'41	120	7.0	N	DR	600	3.0	16	ORC	DR	6.2-6.7	0-4	RC	34.0	8.0
Series 90	'41	120	7.0	N	DR	600	3.0	16	ORC	DR	6.2-6.7	0-4	RC	34.0	8.0
Series 44	'42	120	7.0	N	DR	525	3.37	12	ORC	DR	6.2-6.7	0-4	RC	34.0	8.0
Series 46	'42	120	7.0	N	DR	600	3.0	16	ORC	DR	6.2-6.7	0-4	RC	34.0	8.0
Series 50	'46	100	7.0	N	DR	575	3.4	12	ORC	DR	6.2-6.7	0-4	RC	33.0	8.0
Series 70	'46	120	7.0	N	DR	600	3.0	16	ORC	DR	6.2-6.7	0-4	RC	33.0	8.0
Series 40	'47	100	7.0	N	DR	575	3.4	12	ORC	DR	6.2-6.7	0-4	RC	32-34H	7.2-7.4H
Series 50	'47	100	7.0	N	DR	575	3.4	12	ORC	DR	6.2-6.7	0-4	RC	32-34H	7.2-7.4H
Series 70	'47	120	7.0	N	DR	600	3.0	16	ORC	DR	6.2-6.7	0-4	RC	32-34H	7.2-7.4H
Series 40, 50, 70	'48	(Not distributed in Canada)													
Series 40, 50, 70	'49	(Not distributed in Canada)													
Series 40, 50, 70	'50	(Not distributed in Canada)													
CADILLAC															
All Series	'41	115	—	P	DR	600	3.0	16	ORC	DR	6.2-6.7	0-4	RC	32.0	8.0
All Series	'42	115	—	P	DR	600	3.0	16	ORC	DR	6.2-6.7	0-2	RC	35.0	8.0
"V" Eight	'46	115	8.0	N	DR	600	3.0	16	ORC	DR	6.4-6.9	—	RC	35.0	8.0
Eight	'47	115	8.0	N	DR	600	3.0	16	ORC	DR	6.4-6.9	0-4@	RC	34-36	8.0
V-8	'48	(Not distributed in Canada)													
V-8	'49	(Not distributed in Canada)													
V-8	'50	(Not distributed in Canada)													
CHEVROLET															
Six	'41	97	—	N	DR	525	3.4	12	ORC	DR	6.2-6.7	0-4	RC	35.0	8.0
Six	'42	97	—	N	DR	525	3.4	12	ORC	DR	6.2-6.7	0-4	RC	35.0	8.0
Six	'46	100	7.0	N	DR	525	3.4	12	ORC	DR	6.2-6.7	0-4	RC	35.0	7.3
Six	'47	100	7.0	N	DR	525	3.4	12	ORC	DR	6.2-6.7	0-4	RC	35.0	7.2-7.4†
Six	'48	100	7.0	N	DR	525	3.4	12	ORC	DR	6.4	0-4	RC	36.0	7.4
Six	'49	100	7.0	N	DR	525	3.4	12	ORC	DR	5.9-6.8q	0-4	RC	32-40G	7.0-7.7†
Six	'50	100	7.0	N	DR	525	3.4	12	ORC	DR	5.9-6.8q	0-4	RC	34-40-G	7.0-7.7
CHRYSLER															
Royal 6 C-28	'41	120	—	P	AL	880	4.0	25	ORC	AL	6.4-6.6	4-6	RC	34-36	8.0
New Yorker 8 C-30	'41	135	—	P	AL	880	4.0	25	ORC	AL	6.4-6.6	4-6	RC	34-36	8.0
Crown Imp. C-33	'41	135	—	P	AL	880	4.0	25	ORC	AL	6.4-6.6	4-6	RC	34-36	8.0
Royal 6 C-34	'42	120	—	P	AL	880	4.0	25	ORC	AL	6.4-6.6	4-6	RC	34-36	8.0
New Yorker 8 C-36	'42	135	—	P	AL	880	4.0	25	ORC	AL	6.4-6.6	4-6	RC	34-36	8.0
Crown Imp. C-37	'42	135	—	P	AL	880	4.0	25	ORC	AL	6.4-6.6	4-6	RC	34-36	8.0
C-38W, C-38S	'46	120	5.0	P	AL	580	3.4	15	ORC	AL	6.6-6.9	2-6	RC	35.0	8.0
C-38W, C-38S	'47	120❖	6.0	P	AL	580	3.4	14-16	ORC	AL	6.6-6.9	2-6	RC	35.0	8.0
Eight—C-39, C-40	'47	135❖	6.8	P	AL	580	3.4	14-16	ORC	AL	6.6-6.9	2-6	RC	35.0A	8.0
C-38W, C-38S	'48	120❖	6.0	P	AL	580	3.4	14-16	ORC	AL	6.6-6.9	2-6	RC	35.0	8.0
Eight—C-39, C-40	'48	135❖	6.8	P	AL	580	3.4	14-16	ORC	AL	6.6-6.9	2-6	RC	35.0A	8.0
Six C-45	'49	120	6.0	P	AL	580	3.4	14-16	ORC	AL	6.6-6.9	2-6	RC	35.0	8.0

For key to abbreviations see page 89

(*Continued on page 81*)

Visual Inspection Chart
STARTING MOTOR



AUTOLEC

BATTERY, STARTING MOTOR AND GENERATOR

Make and Model	Year	Battery—Amp. Hr. Capacity	Bench Charging Rate—Finish	Terminal Grounded	Starting Motor—Make	Lock Test—Amp. Draw	Lock Test—Volts	Lock Test—Torque (ft.-lbs.)	Drive Type	Generator—Make	Cutout Relay—Volts to Close	Cutout Relay—Amps. to open	Type Generator Regulation	Maximum Charging Rate—Amps.	Maximum Charging Rate—Volts
CHRYSLER—(Cont.)		BATTERY			STARTING MOTOR					GENERATOR					
Eight C-46, C-47	'49	—	6.8	P	AL	580	3.4	14-16	ORC	AL	6.6-6.9	2-6	RC	35.0	8.0
Six	'50	120	6-8	P	AL	580	3.4	14-16	ORC	AL	6.6-6.9	2-6	RC	35.0	8.0
Eight	'50	135	6-8	P	AL	580	3.4	14-16	ORC	AL	6.6-6.9	2-6	RC	35.0	8.0
CROSLEY															
CC (Up to 41547)	'47	70	4.0	P	AL	280	2.0	11.8	Bend	AL	6.4-6.7	4-6	RC	35.0	8.0
CC,CD(Up to 106039)	'48	70	4.0	P	AL	280	2.0	11.8	Bend	AL	6.4-6.7	4-6	RC	35.0	8.0
CD (After 106039)	'49	70	4.0	P	AL	280	2.0	11.8	Bend	AL	6.4-6.7	4-6	RC	35.0	8.0
Crosley	'50	70	4.0	P	AL	280	2.0	4.4	Bend	AL	6.4-7.0	4-6	RC	35.0	8.0
DE SOTO															
Six S-8	'41	105	—	P	AL	670	4.0	18	ORC	AL	6.4-6.6	4-6	RC	34-36	8.0
Six S-10	'42	105	—	P	AL	670	4.0	18	ORC	AL	6.4-6.6	4-6	RC	34-36	8.0
S-11	'46	110	5.0	P	AL	525	3.4	13	ORC	AL	6.6-6.9	2-6	RC	35.0	8.0
S-11	'47	110	5.5	P	AL	525	3.4	12-14	ORC	AL	6.6-6.9	2-6	RC	35.0	8.0
S-11	'48	110	5.5	P	AL	525	3.4	12-14	ORC	AL	6.6-6.9	2-6	RC	35.0	8.0
S-13 Custom	'49	114	5.5	P	AL	525	3.4	12-14	ORC	AL	6.6-6.9	2-6	RC	35.0	8.0
S14	'50	114	5.5	P	AL	525	3.4	12-14	ORC	AL	6.6-6.9	2-6	RC	35.0	8.0
DODGE															
Kingsway 6 D-20	'41	95	—	P	AL	560	4.0	11.8	ORC	AL	6.4-6.6	4-6	RC	34-36	8.0
De Luxe D-21	'41	95	—	P	AL	560	4.0	11.8	ORC	AL	6.4-6.6	4-6	RC	34-36	8.0
Luxury Liner D-19	'41	95	—	P	AL	560	4.0	11.8	ORC	AL	6.4-6.6	4-6	RC	34-36	8.0
De Luxe D-23	'42	95	—	P	AL	560	4.0	11.8	ORC	AL	6.4-6.6	4-6	RC	34-36	8.0
Custom D-22	'42	95	—	P	AL	560	4.0	11.8	ORC	AL	6.4-6.6	4-6	RC	34-36	8.0
D-25	'46	95	5.0	P	AL	525	3.8	13	Bend	AL	6 6-6.9	2-6	RC	35.0	8.0
D-24	'46	105	5.0	P	AL	525	3.8	13	Bend	AL	6.6-6.9	2-6	RC	35.0	8.0
D-25	'47	95	4.8	P	AL	525	3.8	12-14	Bend	AL	6.6-6.9	2-6	RC	35.0	8.0
D-24	'47	95	5.3	P	AL	525	3.4	12-14	Bend	AL	6.6-6.9	2-6	RC	35.0	8.0
D-25	'48	95	4.8	P	AL	525	3.8	12-14	Bend	AL	6.6-6.9	2-6	RC	35.0	8.0
D-24	'48	95	5.3	P	AL	525	3.4	12-14	Bend	AL	6.6-6.9	2-6	RC	35.0	8.0
D-30	'49	105	5.3	P	AL	525	3.4	12-14	Bend	AL	6.6-6.9	2-6	RC	35.0	8.0
D-31, D-32	'49	100	4.8	P	AL	525	3.8	12-14	Bend	AL	6.6-6.9	2-6	RC	35.0	8.0
D34-D35-D36	'50	105b	5.3(b)	P	AL	525	3.4c	12-14	Bend	AL	6.6-6.9	2-6	RC	35.0	8.0
FORD															
V-8 85	'41	120	8.0	P	O	500	3.2	14	Bend	FA	6.0-6.3	7-8	RC	32.0	—
V-8 85	'42	120	8.0	P	O	500	3.2	14	Bend	FA	6.0-6.3	7-8	RC	32.0	—
De Luxe	'46	120	6.0‡	P	AL	600	3.0	16	Bend	AL	6.3-6.9	2-6	VR	32.0	7.4
Super De Luxe	'46	120	6.0‡	P	AL	600	3.0	16	Bend	AL	6.3-6.9	2-6	VR	32.0	7.4
De L. & Super De L.	'47	120	6.0‡	P	AL	600	3.0	16	Bend	AL	6.3-6.9	2-6	RC	32.0	7.4
De L. & Super De L.	'48	120	6.0‡	P	AL	600	3.0	16	Bend	AL	6.3-6.9	2-6	RC	32.0	7.4
V-8	'49	100	6.0	P	AL	600	3.0	16	Bend	AL	6.3-6.9	2-6	RC	32.0	7.4
V-8	'50	100	4.0	P	AL	550	3.75	15	Bend	AL	6.6	8.0	RC	34-38	7.2-7.6
FRAZER															
F-47	'47	105	7.0	P	AL	670	4.0	18	Bend	AL	6.4-7.0	4-6	RC	35.0	8.0
F47,F47C, F485, F486.	'48	105	7.0	P	AL	670	4.0	18	Bend	AL	6.4-6.6	4.8-5.6	RC	35∅	7.35∅
F-495, 496	'49	100	7.0	P	AL	505	3.0	10n	Bend	AL	6.4-7.0	4.1-4.8	RC	35∅	7.2-7.5∅
F-495, 496	'50	100	7.0	P	AL	505	3.0	10m	Bend	AL	6.4-7.0	4.1-4.8	RC	35∅	7.2-7.5∅

For key to abbreviations see page 89

BATTERY, STARTING MOTOR AND GENERATOR

Make and Model	Year	Battery—Amp. Hr. Capacity	Bench Charging Rate—Finish	Terminal Grounded	Starting Motor—Make	Lock Test—Amp. Draw	Lock Test—Volts	Lock Test—Torque (ft.-lbs.)	Drive Type	Generator—Make	Cutout Relay—Volts to Close	Cutout Relay—Amps. to open	Type Generator Regulation	Maximum Charging Rate—Amps.	Maximum Charging Rate—Volts
HILLMAN MINX (English) **BATTERY**					**STARTING MOTOR**					**GENERATOR**					
Mark III	'49	51-10	—	P	L	404-450	3.3-7.8	10	—	L	—	—	VR	—	—
Mark IV	'50	51-10	5.0	P	L	—	7⅝	9.3	O	L	12.7-13.3	—	VR	13	13
					L	300-350	8.0	9.3	O	L	—	—	VR	—	—
HUDSON															
Six 10	'41	96	—	P	AL	560	4.0	11.8	Bend	AL	6.4-6.6	4-6	VR	32-34	8.0
Six 11-12	'41	96	—	P	AL	560	4.0	11.8	Bend	AL	6.4-6.6	4-6	VR	39-43	8.0
Six 18	'41	96	—	P	AL	560	4.0	11.8	Bend	AL	6.4-6.6	4-6	VR	32-34	8.0
Eight	'41	108	—	P	AL	775	4.0	22.5	Bend	AL	6.4-6.6	4-6	VR	39-43	8.0
"6"—20Sp	'42	96	—	P	AL	540	4.0	12.3	Bend	AL	6.5-7.2	2.0	VR	35.0	8.0
"6"—20P, 21, 22	'42	96	—	P	AL	540	4.0	12.3	Bend	AL	6.5-7.2	2.0	VR	43.0	8.0
"6"—28	'42	96	—	P	AL	540	4.0	12.3	Bend	AL	6.5-7.2	2.0	VR	35.0	8.0
Eights	'42	108	—	P	AL	780	4.0	22.5	Bend	AL	6.5-7.2	2.0	VR	43.0	8.0
Six-51, 52	'46	96	—	P	AL	540	4.0	12.3	Bend	AL	6.5-7.2	2-0	VR	44.0	8.0
Eight-53, 54	'46	108	—	P	AL	780	4.0	22.5	Bend	AL	6.5-7.2	2-0	VR	44.0	8.0
Six-171, 172	'47	96	—	P	AL	540	4.0	12.3	Bend	AL	6.5-7.2	2-0	VR	37H	8.0
Eight-173, 174	'47	108	—	P	AL	780	4.0	22.5	Bend	AL	6.5-7.2	2-0	VR	37H	8.0
Series 481, 482	'48	120	BC	P	AL	880	4.0	25	Bend	AL	6.4-7.0	2.0	VR	43.0	8.0
Series 483,484	'48	120	BC	P	AL	880	4.0	25	Bend	AL	6.4-7.0	2.0	VR	43.0	8.0
Series 491, 492	'49	120	BC	P	AL	880	4.0	25	Bend	AL	6.4-7.0	2.0	VR	43.0	8.0
Series 493, 494	'49	120	BC	P	AL	880	4.0	25	Bend	AL	6.4-7.0	2.0	VR	43.0	8.0
Series 500-504	'50	100	(BC)	P	AL	880	4.0	25	Bend	AL	6.4-7.0	2.0	VR	35.0	8.0
HUMBER															
Super Snipe Mk. III	'48	63	3.0	P	L	450-500	7.2	8.0	O	L	—	—	VR	13.0	13.0
Hawk Mk. II	'49	51-10	3.0	P	L	450-500	7.2	8.0	O	L	—	—	VR	13.0	13.0
Pullman Mk. II	'49	63	3.0	P	L	450-500	7.2	8.0	O	L	—	—	VR	13.0	13.0
Super Snipe Mk. III	'49	63	3.0	P	L	450-500	7.2	8.0	O	L	—	—	VR	13.0	13.0
Hawk Mk. III	'50	51-10	3.0	P	L	450-500	7.2	8.0	O	L	—	—	VR	13.0	13.0
Pullman Mk. II	'50	63	3.0	P	L	450-500	7.2	8.0	O	L	—	—	VR	13.0	13.0
Super Snipe Mk. III	'50	63	3.0	P	L	450-500	7.2	8.0	O	L	—	—	VR	13.0	13.0
JAGUAR (English)															
1½ Litre. Sal.	'46-'48	50	—	P	L	450	7.2	17	Bend	L	—	35-50	AVC	20.0	13.5
2½ Ltre. S&C.	'46-'48	63	—	P	L	450	7.2	17	Bend	L	—	35-50	AVC	20.0	13.5
3½ Ltre. S&C.	'46-'48	63	—	P	L	430	8.0	22.5	Bend	L	—	35-50	AVC	20.0	13.5
2½ Ltre. S&C. Mk. V	'49	64	—	P	L	450	7.2	17	Bend	L	—	35-50	AVC	20.0	13.5
3½ Ltre. S&C. Mk. V	'49	64	—	P	L	430	8.0	22.5	Bend	L	—	35-50	AVC	20.0	13.5
3½ Ltre. XK. 120 S.S.	'49	64	—	P	L	430	4.0	22.5	Bend	L	—	35-50	AVC	20.0	13.5
KAISER															
K-100	'47	105	7.0	P	AL	670	4.0	18.	Bend	AL	6.4-7.0	4-6	RC	35.0	8.0
K-100-101-481-482	'48	105	7.0	P	AL	670	4.0	18	Bend	AL	6.4-6.6	4.8-5.6	RC	35∅	7.35∅
Series K-491, 492	'49	100	7.0	P	AL	505	3.0	10m	Bend	AL	6.4-7.0	4.1-4.8	RC	35∅	7.27.5∅
K-491, 492	'50	100	7.0	P	AL	505	3.0	10m	Bend	AL	6.4-7.0	4.1-4.8	RC	35∅	7.2-7.5∅
LINCOLN															
Linc. & Linc. Cont.	'41	120	—	P	O	500	3.6	14	Bend	O	6.0-6.3	7-8.0	RC	30-33	6.9-7.2
Linc. & Linc. Cont.	'47	120	4.0	P	O	600	3.0	16	Bend	O	6.1-6.3	0-7.5	RC	36.0	7.3
Linc. & Linc. Cont.	'48	120	4.0	P	O	600	3.0	16	Bend	O	6.1-6.3	0-7.5	RC	36.0	7.3
Linc. & Linc. Cont.	'49	(Not distributed in Canada)													
Linc. & Linc. Cont.	'50	(Not distributed in Canada)													

For key to abbreviations see page 89

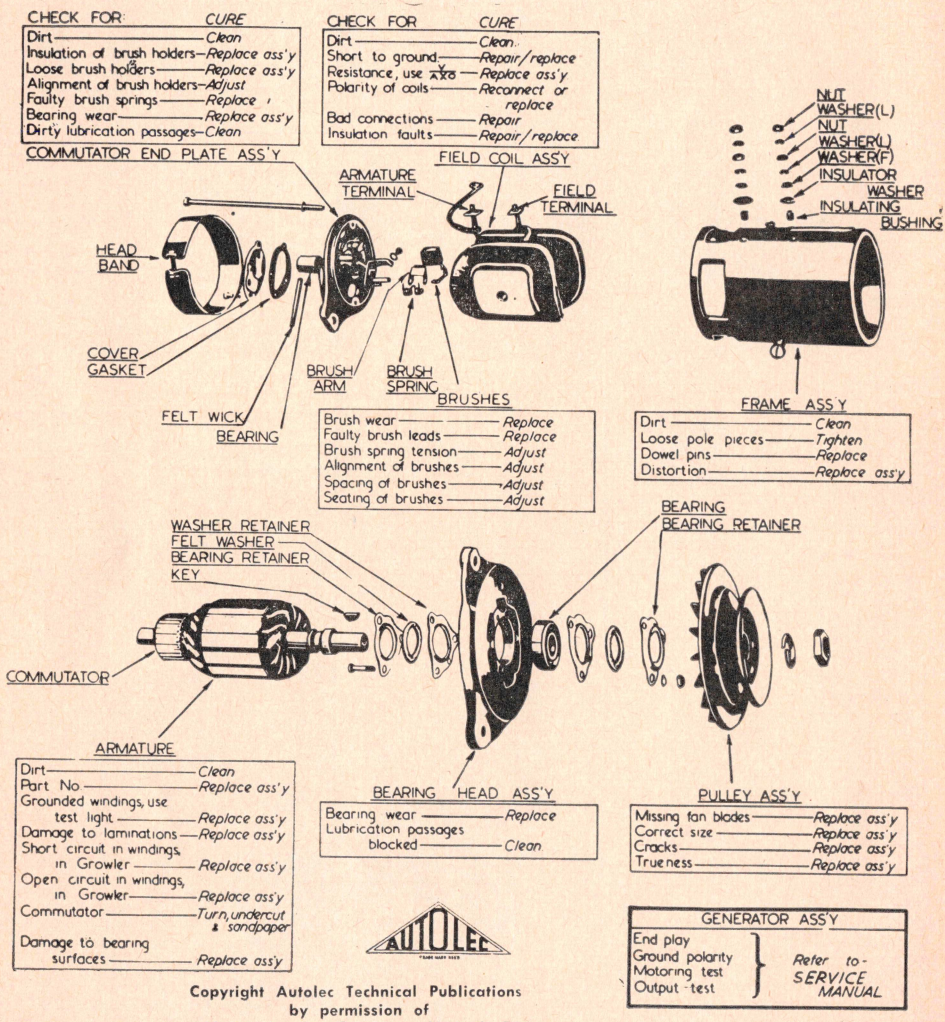
BATTERY, STARTING MOTOR AND GENERATOR

Make and Model	Year	Battery—Amp. Hr. Capacity	Bench Charging Rate—Finish	Terminal Grounded	Starting Motor—Make	Lock Test—Amp. Draw	Lock Test—Volts	Lock Test—Torque (ft.-lbs.)	Drive Type	Generator—Make	Cutout Relay—Volts to Close	Cutout Relay—Amps. to open	Type Generator Regulation	Maximum Charging Rate—Amps.	Maximum Charging Rate—Volts
MERCURY		BATTERY			START.NG MOTOR					GENERATOR					
Mercury	'41	120	8.0	P	O	500	3.2	14	Bend	FA	6.0-6.3	7-8	RC	32.0	—
Mercury	'42	120	8.0	P	O	500	3.2	14	Bend	FA	6.0-6.3	7-8	RC	32.0	—
114 & 114X	'46	120	6.0‡	P	AL	600	3.0	16	Bend	AL	6.3-6.9	2-6	VR	32.0	7.4
118	'46	120	6.0‡	P	AL	600	3.0	16	Bend	AL	6.3-6.9	2-6	VR	32.0	7.4
114, 114X & 118	'47	120	6.0‡	P	AL	600	3.0	16	Bend	AL	6.3-6.9	2-6	RC	32.0	7.4
114, 114X & 118	'48	120	6.0‡	P	AL	600	3.0	16	Bend	AL	6.3-6.9	2-6	RC	32.0	7.4
Mercury	'49	100	6.0	P	AL	600	3.0	16	Bend	AL	6.3-6.9	2.6	RC	32.0	7.4
Mercury	'50	100	4.0	P	AL	550	3.75	15	Bend	AL	6.6	8.0	RC	34-38	7.2-7.6
METEOR															
Meteor	'49	100	6.0	P	AL	600	3.0	16	Bend	AL	6.3-6.9	2.6	RC	32.0	7.4
Meteor	'50	100	4.0	P	AL	550	3.75	15	Bend	AL	6.6	8.0	RC	34-38	7.2-7.6
MG (English)															
T.C.	'48	41-10	5-6	P	L	450	7.0	7.5	L	L	13.5	3M	CVC	—	15.8
Series Y	'49	51-10	—	—	—	500	7.5	15.5	L	L	—	—	CVC	—	—
Series TD	'50	51-10	3.5	P	L	430	7.6	10	L	L	12.7-13.3	3-5	CVC	17.0	13.5
Series Y	'50	51-10	3.7	P	L	430	7.6	10	L	L	12.7-13.3	3-5	CVC	17.0	13.5
MONARCH															
Monarch	'46	120	6.0‡	P	AL	600	3.0	16	Bend	AL	6.3-6.9	2-6	VR	32.0	7.4
Monarch	'47	120	6.0‡	P	AL	600	3.0	16	Bend	AL	6.3-6.9	2-6	RC	32.0	7.4
Monarch	'48	120	6.0‡	P	AL	600	3.0	16	Bend	AL	6.3-6.9	2-6	RC	32.0	7.4
Monarch	'49	100	6.0	P	AL	600	3.0	16	Bend	AL	6.3-6.9	2.6	RC	32.0	7.4
V-8	'50	100	4.0	P	AL	550	3.75	15	Bend	AL	6.6	8.0	RC	34-38	7.2-7.6
MORRIS (English)															
8 Series E	'48	—	5-6	P	L	300-350	8.0	9.3	O	L	6.6	3M	3Br	—	—
10 Series M	'48	—	5-6	P	L	300-350	8.0	9.3	O	L	13.5	3M	—	—	—
Minor	'48	38	2.5	P	L	300-350	8.0	9.3	O	L	—	3-5	CVC	17.0	13.5
Oxford	'48	51-10	3.5	P	L	300-350	8.0	9.3	O	L	—	3-5	CVC	17.0	13.5
Minor	'49	38	2.5	P	L	300-350	8.0	9.3	O	L	—	3-5	CVC	17.0	13.5
Oxford	'49	51-10	3.5	P	L	300-350	8.0	9.3	O	L	—	3-5	CVC	17.0	13.5
Six	'49	51-10	3.5	P	L	300-350	8.0	9.3	O	L	12.7-13.3	3-5	CVC	20.0	13.5
Minor	'50	38	2.5	P	L	300-350	8.0	9.3	O	L	—	3-5	CVC	17.0	13.5
Oxford	'50	51-10	3.5	P	L	300-350	8.0	9.3	O	L	—	3-5	CVC	17.0	13.5
Six	'50	51-10	3.5	P	L	300-350	8.0	9.3	O	L	12.7-13.3	3-5	CVC	20.0	13.5
NASH															
Ambassador 600	'41	90	—	P	DR	540	3.3	11.5	Bend	DR	6.2-6.7	0-4	RC	34.0	8.0
Ambassador 6	'41	105	—	P	AL	775	4.0	22.5	Bend	AL	6.4-6.6	4-6	RC	34-36	8.0
Ambassador 8	'41	120	—	P	AL	775	4.0	22.5	Bend	AL	6.4-6.6	4-6	RC	34-36	8.0
4240—"6"	'42	90	—	P	DR	540	3.3	11.5	Bend	DR	6.2-6.7	0-4	RC	34.0	8.0
4260—"6"	'42	105	—	P	AL	775	4.0	22.5	Bend	AL	6.4-6.6	4-6	RC	34-36	8.0
4280—"8"	'42	120	—	P	AL	775	4.0	22.5	Bend	AL	6.4-6.6	4-6	RC	34-36	8.0
Series 4640	'46	90	—	P	AL	—	—	—	—	AL	6.4-6.7	4-6	RC	35.0	8.0
Series 4660	'46	105	—	P	AL	775	4.0	22.5	Bend	AL	6.4-6.7	4-6	RC	35.0	7.4
Series 4740	'47	90	4-6	P	AL	—	—	—	Bend	AL	6.4-6.7	4-6	RC	35.0	7.4
Series 4760	'47	105	4-6	P	AL	775	4.0	22.5	Bend	AL	6.4-6.7	4-6	RC	35.0	7.4

For key to abbreviations see page 89

(Continued on page 85)

Visual Inspection Chart
GENERATOR



BATTERY, STARTING MOTOR AND GENERATOR

Make and Model	Year	Battery—Amp. Hr. Capacity	Bench Charging Rate—Finish	Terminal Grounded	Starting Motor—Make	Lock Test—Amp. Draw	Lock Test—Volts	Lock Test—Torque (ft.-lbs.)	Drive Type	Generator—Make	Cutout Relay—Volts to Close	Cutout Relay—Amps. to open	Type Generator Regulation	Maximum Charging Rate—Amps.	Maximum Charging Rate—Volts
NASH—(Continued)		BATTERY			STARTING MOTOR					GENERATOR					
Series 4840	'48	90	2	P	AL	540	3.3	—	Bend	AL	6.2-6.7	4-6	FC	32-34	7.2-7.4
Series 4860	'48	120	2	P	AL	540	3.3	—	Bend	AL	6.2-6.7	4-6	FC	34.0	7.2-7.4
Series 4940	'49	90	6	P	DR	540	3.3	11.5	Bend	DR	6.2-6.7	4-6	RC	32-35	7.2-7.4
Series 4960	'49	105	7	P	DR	600	3.0	16	Bend	DR	6.2-6.7	4-6	RC	32-35	7.2-7.4
Canadian Statesman	'50	100	—	P	AL	280	2.0	4.4	DR	AL	6.4-7.0	4.1-4.8	RC	34-36	7.2-7.5
Statesman (U.S.)	'50	90	—	P	DR	540	3.3	11.5	Bend	DR	6.2	4-6	RC	32-40	7.0-7.7
Ambassador (U.S.)	'50	105	—	P	DR	600	3.0	16	Bend	DR	6.2	4-6	RC	32-40	7.0-7.7
Rambler (U.S.)	'50	90	—	P	DR	540	3.3	11.5	DR	DR	5.9-6.8	4-6	RC	32-40	7.0-7.7

For key to abbreviations see page 89

BATTERY, STARTING MOTOR AND GENERATOR

Make and Model	Year	Battery—Amp. Hr. Capacity	Bench Charging Rate—Finish	Terminal Grounded	Starting Motor—Make	Lock Test—Amp. Draw	Lock Test—Volts	Lock Test—Torque (ft.-lbs.)	Drive Type	Generator—Make	Cutout Relay—Volts to Close	Cutout Relay—Amps. to open	Type Generator Regulation	Maximum Charging Rate—Amps.	Maximum Charging Rate—Volts
OLDSMOBILE		BATTERY			STARTING MOTOR					GENERATOR					
Six	'41	100	—	N	DR	525	3.37	12	ORC	DR	6.2-6.7	0-4	RC	34.0	8.0
Six (Imported)	'41	100	4.5	N	DR	525	3.37	12	ORC	DR	6.2-6.7	0-4	RC	34.0	8.0
Eight	'41	120	4.5	N	DR	600	3.0	15	ORC	DR	6.2-6.7	0-4	RC	34.0	8.0
Six	'42	100	—	N	DR	525	3.37	12	ORC	DR	6.2-6.7	0-4	RC	34.0	8.0
Eight	'42	120	4.5	N	DR	600	3.0	15	ORC	DR	6.2-6.7	0-4	RC	34.0	8.0
Six	'46	100	4.5	N	DR	475	3.0	12	ORC	DR	6.5	2.0	RC	33.0	7.8
Eight	'46	120	5.25	N	DR	600	3.0	15	ORC	DR	6.5	2.0	RC	33.0	7.8
Six	'47	100	7.0	N	DR	475	3.0	12	ORC	DR	6.2-6.7	0-4	RC	32-34	7.2-7.4†
Eight	'47	120	7.0	N	DR	600	3.0	15	ORC	DR	6.2-6.7	0-4	RC	32-34	7.2-7.4†
Six	'48	100	7.0	N	DR	475	3.0	12	ORC	DR	6.2-6.7	0.4	RC	32-34	7.2-7.4†
Eight	'48	120	7.0	N	DR	600	3.0	15	ORC	DR	6.2-6.7	0-4	RC	32-34	7.2-7.4†
Six	'49	100	4.5	N	DR	600	3.0	15	ORC	DR	6.5	0-4	RC	40.0	8.0
Eight	'49	115	5.25	N	DR	600	3.0	15	ORC	DR	6.5	0-4	RC	40.0	8.0
Six ("76")	'50	100	4.5	N	DR	600	3.0	15	ORC	DR	6.5	0-4	RC	40.0	8.0
Eight ("88")	'50	115	5.25	N	DR	600	3.0	15	ORC	DR	6.5	0-4	RC	40.0	8.0
PACKARD															
110 (Series 1900)	'41	95	—	P	AL	670	4.0	18	Bend	AL	6.4-6.6	4-6	RC	34-36	8.0
120	'41	114	—	P	AL	670	4.0	18	Bend	AL	6.4-6.6	4-6	RC	34-36	8.0
Super 8	'41	114	—	P	AL	906	4.0	45.9	ORC	AL	6.4-6.6	4-6	RC	34-36	8.0
"6"—2000	'42	100	—	P	AL	670	4.0	18	Bend	AL	6.5-7	4-6	VR	35.0	8.0
"8"—2001	'42	100	—	P	AL	670	4.0	18	Bend	AL	6.5-7	4-6	VR	35.0	8.0
"Super 8"—2003, 6	'42	120	—	P	AL	906	4.0	45.9	ORC	AL	6.5-7	4-6	VR	35.0	8.0
2100	'46	100	—	P	AL	670	4.0	18	Bend	AL	6.5-7	—	VR	35.0	—
2101 & 2111	'46	100	—	P	AL	670	4.0	18	Bend	AL	6.5-7	—	VR	35.0	—
2103 & 2126	'46	120	—	P	AL	906	4.0	45.9	SA	AL	6.5-7	—	VR	35.0	—
2100 & 2130	'47	100	—	P	AL/DR	670	4.0	18	Bend	AL	6.5-7	—	RC	35.0	7.4
2101 & 2111	'47	100	—	P	AL	670	4.0	18	SA	AL	6.5-7	—	RC	35.0	7.4
2103, 2106 & 2126	'47	120	—	P	AL	906	4.0	45.9	SA	AL	6.5-7	—	RC	35.0	7.4
2201, 2211	'48	100	—	P	AL/DR	—	4/3	25/16	Bend	—	6.5-7	—	VR	35.0	7.4
2202, 2232	'48	100	—	P	AL/DR	—	4/3	25/16	Bend	—	6.5-7	—	VR	35.0	7.4
2206, 2233	'48	120	—	P	AL	906	4.0	45.9	SA	AL	6.5-7	—	VR	35.0	7.4
2301	'49	100	40	P	DR/AL	—	—	—	Bend	AD	6.5-7	—	VR	40.0	7.4
2302, 2332	'49	100	40,45	P	DR/AL	—	—	—	Bend	AD	6.5-7	—	VR	40, 45	7.4
2306, 2333	'49	120	45	P	AL	—	—	—	SA	AD	6.5-7	—	VR	45.0	7.4
2301	'50	100	40	P	DR/AL	—	—	—	Bend	AD	6.5-7	—	VR	40.0	7.4
2302, 2332	'50	100	40,45	P	DR/AL	—	—	—	Bend	AD	6.5-7	—	VR	40.45	7.4
2306, 2333	'50	120	45	P	AL	—	—	—	SA	AD	6.5-7	—	VR	45.0	7.4
PLYMOUTH															
Road King P-11	'41	95	—	P	AL	670	4.0	18	ORC	AL	6.4-6.6	4-6	RC	34-36	8.0
De Luxe P-12	'41	95	—	P	AL	670	4.0	18	ORC	AL	6.4-6.6	4-6	RC	34-36	8.0
De Luxe P-14	'42	95	—	P	AL	670	4.0	18	ORC	AL	6.4-6.6	4-6	RC	34-36	8.0
P-15	'46	95	5.0	P	AL	525	3.8	13	Bend	AL	6.6-6.9	2-6	RC	35.0	8.0
P-15	'47	95	4.8	P	AL	525	3.8	12-14	Bend	AL	6.6-6.9	2-6	RC	35.0	8.0
P-15	'48	95	4.8	P	AL	525	3.8	12-14	Bend	AL	6.6-6.9	2-6	RC	35.0	8.0
P17, P18	'49	100	4.8	P	AL	525	3.8	12-14	Bend	AL	6.6-6.9	2-6	RC	35.0	8.0
P-19, P-20	'50	100	4.8	P	AL	525	3.8	12-14	Bend	AL	6.6-6.9	2-6	RC	35.0	8.0
PONTIAC															
Fleet. & Torpedo 6	'41	100	—	N	DR	525	3.37	12	ORC	DR	6.2-6.7	0-4	RC	34.0	8.0
Sixes	'42	100	—	N	DR	525	3.37	12	ORC	DR	6.2-6.7	0-4	RC	34.0	8.0

For key to abbreviations see page 89

BATTERY, STARTING MOTOR AND GENERATOR

Make and Model	Year	Battery—Amp. Hr. Capacity	Bench Charging Rate—Finish	Terminal Grounded	Starting Motor—Make	Lock Test—Amp. Draw	Lock Test—Volts	Lock Test—Torque (ft.-lbs.)	Drive Type	Generator—Make	Cutout Relay—Volts to Close	Cutout Relay—Amps. to open	Type Generator Regulation	Maximum Charging Rate—Amps.	Maximum Charging Rate—Volts
PONTIAC—(Continued)		**BATTERY**			**STARTING MOTOR**					**GENERATOR**					
Six	'46	100	7.0	N	DR	525	3.37	12	Bend	DR	6.2-6.7	0-4	RC	32-34	7.2-7.4†
Eight	'46	100	7.0	N	DR	600	3.0	15	Bend	DR	6.2-6.7	0-4	RC	32-34	7.2-7.4†
Six	'47	100	7.0	N	DR	525	3.37	12	Bend	DR	6.2-6.7	0-4	RC	32-34	7.2-7.4†
Eight	'47	100	7.0	N	DR	600	3.0	15	Bend	DR	6.2-6.7	0-4	RC	32-34	7.2-7.4†
Six	'48	100	7.0	N	DR	525	3.37	12	Bend	DR	6.2-6.7	0-4	RC	32-34	7.2-7.4†
Eight	'48	100	7.0	N	DR	600	3.0	15	Bend	DR	6.2-6.7	0-4	RC	32-34	7.2-7.4†
Six 2000, 2200, 2500	'49	100	7.0	N	DR	525	3.37	12	ORC	DR	6.4	0-4	RC	36	7.2-7.4†
Eight	'49	100	7.0	N	DR	600	3.0	15	ORC	DR	6.4	0-4	RC	36	7.2-7.4†
Six-2000, 2200, 2500	'50	100	7.0	N	DR	525	3.37	12	ORC	DR	5.9-6.8q	—	RC	32-40	7.0-7.7H
Eight-2700	'50	100	7.0	N	DR	600	3.0	14	ORC	DR	5.9-6.8q	—	RC	32-40	7.0-7.7G
PREFECT (English)															
Four Cylinder	'49	82	—	P	O	500	—	9	Bend	O	7.2-7.9	—	VR	26.3	7.0
Four Cylinder	'50	87	6	P	L	575	—	9	Man	L	6.5	—	—	26.3	7.0
RILEY (English)															
100 hp. 2½-Litre	'49	51-10	5-6	P	L	450	6-7	21	(O)	L	13.3	3M	CVC	13.0	15.8
1½ Litre	'46-'50	58	3.5	P	L	450	7.2	17	L	L	—	3-5	CVC	13.0	13
2½ Litre	'47-'50	63	4.5	P	L	440	7.6	22	L	L	—	3-5	CVC	20.0	13
ROVER (English)															
75	'49	51	5.0	P	L	450m	7.0	15.5	LI	L	12.7-13.3		CVC	20.0	16.0
75	'50	51	5.0	P	L	450	7.2	17	rc	L	—	.5	CVC	20.0	16.4
Land Rover	'50	51	5.0	P	L	450	7.2	17	rc	L	—	.5	CVC	20.0	16.4
STUDEBAKER															
Commander 6-11A	'41	95	5.75	P	AL	670	4.0	18	Bend	AL	6.4-6.6	4-6	RC	34-36	8.0
President 8-7C	'41	95	5.75	P	AL	880	4.0	25	ORC	AL	6.4-6.6	4-6	RC	34-36	8.0
Champion 6-3G	'41	90	5.75	P	AL	560	4.0	11.8	Bend	AL	6.4-6.6	4-6	RC	34-36	8.0
Commander 6-12A	'42	95	5.75	P	AL	670	4.0	18	Bend	AL	6.4-6.6	4-6	RC	34-36	8.0
President 8-8C	'42	95	5.75	P	AL	880	4.0	25	ORC	AL	6.4-6.6	4-6	RC	34-36	8.0
Champion 6-4G	'42	90	5.75	P	AL	560	4.0	11.8	Bend	AL	6.4-6.6	4-6	RC	34-36	8.0
Skyway, 5G	'46	90	5.75	P	AL	560	4.0	11.8	Bend	AL	6.4-6.6	4-6	RC	34-36	8.0
Champion 6-G	'47	100	5.75	P	AL	560	4.0	11.8	Bend	AL	6.4-6.6	4-6	RC	35.0	8.0
Commander 14A	'47	100	5.75	P	AL	670	4.0	18	Bend	AL	6.4-6.6	4-6	RC	35.0	8.0
Champion 7G	'48	100❖	5.75	P	AL	560	4.0	11.8	Bend	AL	6.4-6.6	—	RC	35.0	7.35
Commander 15A	'48	100❖	5.75	P	AL	670	4.0	18	Bend	AL	6.4-6.6	4-6	RC	35.0	7.35
Champion-8G	'49	100	5.75	P	AL	540	4.0	11.8	Bend	AL	6.4-6.66	4-6	RC	35.0	8.0
Commander-16A	'49	100	5.75	P	AL	670	4.0	18	Bend	AL	6.4-6.66	4-6	RC	35.0	8.0
Champion 9G	'50	100	5¾	P	AL	560	4	11.8	Bend	AL	6.4-6.6	—	VR	35.0	7.35
Commander 17A	'50	100	5¾	P	DR	525	3.4	12	Bend	DR	6.4	—	VR	35.0	7.2-7.4
SUNBEAM TALBOT (English)															
90	'49	51	—	P	L	—	—	—	—	L	—	—	VR	—	—
90	'50	51	3	P	L	—	—	—	O	L	—	—	VR	13	13

N.B. Fleetleaders (1941-2-6-7-8) are 20 and 22 Series; Torpedo 6 & 8 (1941-2-6-7-8) are 25 and 27 Series respectively. Streamliner 6 & 8 (1941-2-6-7-8) are 26 and 28 Series respectively; Streamliner 6 & 8 (1948) not distributed in Canada.

For key to abbreviations see page 89

BATTERY, STARTING MOTOR AND GENERATOR

Make and Model	Year	Battery—Amp. Hr. Capacity	Bench Charging Rate—Finish	Terminal Grounded	Starting Motor—Make	Lock Test—Amp. Draw	Lock Test—Volts	Lock Test—Torque (ft.-lbs)	Drive Type	Generator—Make	Cutout Relay—Volts to Close	Cutout Relay—Amps. to open	Type Generator Regulation	Maximum Charging Rate—Amps.	Maximum Charging Rate—Volts
TRIUMPH (English)		BATTERY			STARTING MOTOR					GENERATOR					
Series TRD (1800)47-...	48	—	—	P	L	—	—	—	—	L	—	—	VR	—	—
Series TRA	'49	—	—	P	L	—	—	—	—	L	—	—	VR	—	—
VANGUARD (English)															
Sedan & Est. Car	'49	51-10	5.0	P	L	300-350	8.0	9.3	—	L	—	—	CVC	—	—
Sedan & Est. Car	'50	51-10	5.0	P	L	300-350	8.0	9.3	—	L	—	—	CVC	—	—
VAUXHALL LIP (English)															
Velox	'49	53-20	4.0	P	L	††	††	9.3	V	L	†††	3-5	L	17	(V)
Velox	'50	53-20	4.0	P	L	—	—	9.3	V	L	—	3-5	L	17	(V)
WILLYS															
Willys Americar	'41	80	—	N	AL	560	4.0	11.8	Bend	AL	6.4-6.6	4-6	VR	24-26	8.0
Willys Americar	'42	80	5.0	N	AL	560	4.0	11.8	Bend	AL	6.4-6.6	4-6	VR	24-26	8.0
CJ-2A Universal Jeep	'45	100	—	N	AL	420	3.0	7.8	Bend	AL	6.4-7.0	4-6	RC	35.0	8.0
CJ-2A Universal Jeep	'47	100	4.8	N	AL	420	3.0	7.8	Bend	AL	6.4-7.0	4-6	RC	35.0	8.0
CJ-2A	'48	100	5·0	N	AL	560	3.0	11.8	Bend	AL	7.2-7.5	4-6	RC	35.0	8.0
4-63, 6-63, 2WD&4WD	'48	100	5.0	N	AL	420	3.0	7.8	Man	AL	7.2-7.5	4-6	RC	35.0	8.0
CJ-2A	'49	100	5.0	N	AL	560	3.0	11.8	Bend	AL	7.2-7.5	4-6	RC	35.0	8.0
463, 663, 2WD&4WD	'49	100	5.0	N	AL	420	3.0	7.8	Man	AL	7.2-7.5	4-6	RC	35.0	8.0
CJ-3A	'49	100	5.0	N	AL	560	3.0	7.8	Man	AL	7.2-7.5	4-6	RC	35.0	8.0
4-73 Sta. Wgn.	'50	100❖	7.0	N	AL	280M	2.0	4.4m	SG	AL	6.4-6.9	—	RC	35.0	8.0
4 x 4 63 Sta. Wgn.	'50	100❖		N	AL										
6-73 Sta. Wgn.	'50	100❖	7.0	N	AL	280M	2.0	4.4m	SG	AL	6.4-6.9	—	RC	35.0	8.0
4-73 VJ Jeepster	'50	100❖	7.0	N	AL	280M	2.0	4.4m	SG	AL	6.4-6.9	—	RC	35.0	8.0
6-73 VJ Jeepster	'50	100❖	7.0	N	AL	280M	2.0	4.4 n	SG	AL	6.4-6.9	—	RC	35.0	8.0
WOLSELEY (English)															
Four-Fifty	'49	63-10	5.0	P	L	450-500	7.5	15.5	0	L	12.7-13.3	—	CVC	17.0	—
Six-Eighty	'49	63-10	5.0	P	L	450-500	7.5	15.5	0	L	12.7-13.3	—	CVC	17.0	—
Six-Eighty	'48-'50	63-10	5.0	P	L	450-500	7.5	15.5	0	L	12.7-13.3	3-5	CVC	20.0	13.0
Four-Fifty	'48-'50	63-10	5.0	P	L	450-500	7.5	15.5	0	L	12.7-13.3	3-5	CVC	17.0	13.0

ABBREVIATIONS

@—Reverse current.
A—C-40, 40 amps.
AD—Auto-Lite and Delco-Remy.
AL—Auto-Lite.
b—D35, D36—1000 amp. hr.
(b)—D35, D36—4.8.
Bend—Bendix.
BC—Cold 43A 8V; hot 37A 8V.
(BC)—35 amps at 8 volts.
3Br—Third brush generator.
c—D35, D36—3.8.
CV—Compensated control.
CVC—Constant Voltage Control.
DR—Delco-Remy.
FA—Ford Auto-Lite.
FC—Full Current.
G—36 amps preferred.
(G)—7.4 preferred.
H—Hot.
L—Lucas.
LI—Lucas inertia.
m—Minimum.
M—Maximum.
Man—Manual.
N—Negative.
O—Own.
(O)—Outboard.
ORC—Overrunning clutch.
P—Positive.
q—6.4 preferred.
rc—Rubber cushion type.
RC—Voltage and current regulator.
SA—Solenoid actuated.
SG—Sliding gear with overrunning clutch.
(V)—*Atmospheric Temperature* / *Reg. Setting*
58°F. 16.9 - 17.3
68°F. 16.6 - 17.0
78°F. 16.4 - 16.8
88°F. 16.1 - 16.5
VR—Voltage regulator.
†—Operating temperature.
‡—Providing temperature does not exceed 110°F.
❖—At the 20-hr. discharge rate.
∅—At 70°F.

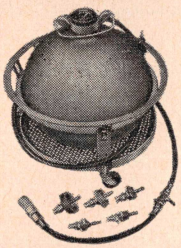
BRAKES AND BRAKE LININGS

Make and Model	Year	Brake Mechanism—Make	Brake Mechanism—Type	Drum Diameter	Lining—Length per Wheel	Lining—Width	Lining—Thickness	Clearance—Toe	Clearance—Heel	F.M.S. Number
ANGLIA (English)										
Four Cylinder	'49	G	FW	10	17.44	1.25	.17	.010	.010	—
Four Cylinder	'50	G	M	10	17.54	1.25	13/64	.010	.010	
AUSTIN (English)										
A.40	'48	G	HM	9	—	—	—	—	—	—
A.40, Devon & Dorset	'49	G	HM	‡	19	1 1/4	3/16	1/2	—	519
A 40, Devon & Dorset	'50	G	HM	9	19	3/16	1/2	N	—	—
BUICK										
Spec. 44; Super 45	'41	O	H	12	b	1 3/4	5/16	.015	.015	
Series 46, 47	'41	O	H	12	cc	2 1/4	5/16	.015	.015	
Series 49	'41	O	H	14	d	2	1/4	.015	.015	
Series 44	'42	O	H	12	22 11/16	1 1/4	5/16	.015	.015	
Series 46	'42	O	H	12	22 15/16	2 1/4	5/16	.015	.015	
Series 50	'46	O	H	12	23 1/16	1 3/4	5/16	.015	.015	
Series 70	'46	O	H	12	23 1/16	2 1/4	5/16	.015	.015	
Series 40	'47	B	H	12	23 1/16	1 3/4	5/16	.015	.015	
Series 50	'47	B	H	12	23 1/16	1 3/4	5/16	.015	.015	
Series 70	'47	B	H	12	23 1/16	2 1/4	5/16	.015	.015	
Series 40, 50, 70	'48	(Not distributed in Canada)								
Series 40, 50, 70	'49	(Not distributed in Canada)								
Series 40, 50, 70	'50	(Not distributed in Canada)								
CADILLAC										
Series 60, 61, 62, 63	'41	B	H	12	24 1/2	2	5/16	.010	.010	
Series 67, 75	'41	B	H	12	24 1/2	2 1/2	5/16	.010	.010	
Series 60, 61, 62, 63	'42	B	H	12	24 1/2	2	5/16	.010	.010	
Series 67, 75	'42	B	H	12	24 1/2	2 1/2	5/16	.010	.010	
"V" Eight	'46	B	H	12	24 1/2	**	5/16	.010	.010	
Eight	'47	B	H	12@	24 1/2	F	5/16	.007-.010	.007-.010	
V-8	'48	(Not distributed in Canada)								
V-8	'49	(Not distributed in Canada)								
V-8	'50	(Not distributed in Canada)								
CHEVROLET										
Six	'41	O	H	11	22 5/8	1 3/4	5/16	w	w	
Six	'42	O	H	11	22 5/8	1 3/4	5/16	w	w	
Six	'46	O	H	11	22 5/8	1 3/4	5/16	w	w	
Six	'47	O	H	11	22 5/8	1 3/4	5/16	w	w	
Six	'48	O	H	11	22 5/8	1 3/4	5/16	w	w	
Six	'49	O	H	11.0	20 5/8	1 3/4	***	w	w	
Six	'50	O	H	11.0	20 5/8	1 3/4	***	w	w	653(b)
CHRYSLER										
Royal 6 C-28	'41	O	H	11	19 7/16	2	13/64	.012	.006	
R. Windsor C-28W	'41	O	H	11	19 7/16	2	13/64	.012	.006	
New Yorker 8 C-30	'41	O	H	12	p	2	13/64	.007	q	
Crown Cus. C-33	'41	O	H	12	p	2	13/64	.007	q	
Royal 6 C-34	'42	O	H	11	19 7/16	2	13/64	.012	.006	
R. Windsor C-34W	'42	O	H	11	19 7/16	2	13/64	.012	.006	
New Yorker 8 C-36	'42	O	H	12	p	2	13/64	.007	q	
Crown Cus. C-37	'42	O	H	12	p	2	13/64	.007	q	

(Continued on page 93)

For key to abbreviations see page 102

Wagner offers everything needed for complete HYDRAULIC BRAKE SERVICE



WAGNER FLUID-BAL Portable and Easy to Handle

Sturdy, well-constructed, portable pressure bleeder and refiller that makes a "one-man" job of bleeding and refilling the hydraulic brake system of any car or truck, and helps modernize your brake department.

SELF-LEVELING MASTER CYLINDER REFILLER

Fully Automatic . . . Fills master cylinder to proper level—and no overflow is possible. Assures reliable job. Capacity onequart.

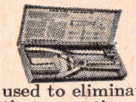
HOME STAND

Brake Cylinder Hone Outfit (AC or DC) includes Hone Motor Drive Assembly, NoGo Gauge and Hone Set, Master Cylinder and No-RoL Wrenches, and Explosion-Proof Switch.

HONE DRIVE ASSEMBLY

(AC or DC) Hone Motor Assembly. The motor is totally enclosed to eliminate the possibil ty of fire hazard, and furnishes a seal against extraneous matter.

MASTER CYLINDER BURRING TOOL



Master Cylinder Burring Tool. This tool is used to eliminate the burr that sometimes forms at the opening of the by-pass hole due to honing.

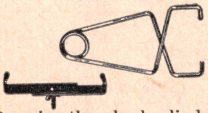
NO GO GAUGES

NoGo Gauges. Castings which are honed so large that the NoGo Gauge can enter should be scrapped.

HONE SET

To be used with a slow-speed drill or drill press. Necessary cutting and polishing stones included, together with adapter. Two assortments: 7/8" to 2" and 1" to 2" diameter.

WHEEL CYLINDER CLAMPS

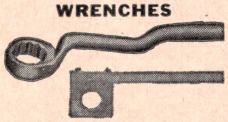


By using the wheel cylinder clamp, accidental blowing out of the pistons and subsequent bleeding operation is avoided.

HYDRAULIC LINE PRESSURE GAUGE

Hydraulic Line Pressure Gauge gives the exact line-pressure reading transmitted from the master cylinder to the wheel cylinder.

WRENCHES

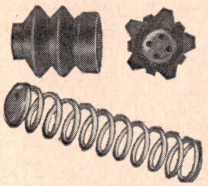


Special wrenches are available to properly adjust and tighten the anchor pins on the Wagner Hi-Tork brake, the Wagner master cylinder heads, and the Wagner NoRoL shaft seal.

BLEEDER DRAIN and WRENCHES

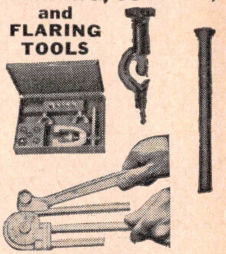
Lightens the bleeding operation. Both wrenches and drain are needed.

WAGNER LOCKHEED HYDRAULIC BRAKE PARTS



Wagner Lockheed hydraulic brake parts are recommended for superior quality, perfect fit, proved performance and long life. Whenever brakes need repair be sure you use genuine Wagner Lockheed parts. Ask for Catalog AU-500 for up-to-date listings.

BENDING, CUTTING, and FLARING TOOLS



Their use will save time and assure good work.

WAGNER LOCKHEED FLUID

Recommended for *all* hydraulic brakes because it retains its highly efficient qualities under all driving conditions. It exceeds S.A.E. Specifications and properly mixes with all other approved fluids and furnishes necessary lubrication for all working parts of the hydraulic brake system.

Send for these Valuable Booklets

1. AU-500 provides one-point reference to fast moving brake parts and lining. Covers Lockheed Hydraulic Brake Parts and Fluid, CoMaX Brake Lining and Friction Materials.

2. HU-197 manual covers general service instructions and maintenance hints for hydraulic brakes.

3. HU-17 gives complete information on how to bleed and refill hydraulic brake systems.

H50-29

Wagner Brake Company Limited
43 Edward Street, Toronto 2, Ontario

BRAKES AND BRAKE LININGS

Make and Model	Year	Brake Mechanism—Make	Brake Mechanism—Type	Drum Diameter	Lining—Length per Wheel	Lining—Width	Lining—Thickness	Clearance—Toe	Clearance—Heel	F.M.S. Number
CHRYSLER—(Continued)										
C-38W Windsor	'46	O-L	H	11	RR	2	13/64	.006	.006	—
C-38S Royal	'46	O-L	H	11	RR	2	13/64	.006	.006	—
Six C-38W, C-38S	'47	O-L	H	11	RR	2	13/64	.006	.006	—
Eight C-39, C-40	'47	O-L	H	12	RS	2	13/64	.006	.006	—
Six C-38W, C-38S	'48	O-L	H	11	RR	2	13/64	.006	.006	—
Eight C-39, C-40	'48	O-L	H	12	RS	2	13/64	.006	.006	—
Six, C-45	'49	O-L	H	11	RR	2	13/64	.006	.006	1161(b)
Eight, C-46, C-47	'49	O-L	H	12	RS	2	13/64	.006	.006	1105(b)
Six	'50	O-	LH	12	25 1/8	2	13/64	.006	.006	—
Eight	'50	O-L	H	12	25 1/8	2	13/64	.006	.006	—
CROSLEY										
CC (Up to 41547)	'47	GH	M	6	14	31/32	5/16	.006-.008	.006-.008	—
CC,CD(Up to 106039)	'48	O	M	6	14	31/32	5/16	.008	.008	—
CD (After 106039)	'49	GH	GH	7	—	—	—	3/8	—	—
Crosley	'50	GH	H	7 1/2	—	1 1/4	3/8	—	—	—
DE SOTO										
Six S-8	'41	O	H	11	19 7/16	2	13/64	.012	.006	—
Six S-10	'42	O	H	11	19 7/16	2	13/64	.012	.006	—
S-11	'46	O-L	H	11	RR	2	13/64	.006	.006	—
S-11	'47	O-L	H	11	RR	2	13/64	.006	.006	—
S-11	'48	O-L	H	11	RR	2	13/64	.006	.006	—
S-13 Custom	'49	O-L	H	11	RR	2	13/64	.006	.006	1161(b)
S14	'50	O-L	H	12	25 1/8	2	13/64	.006	.006	—
DODGE										
Kingsway D-20	'41	O	H	10	18	2	13/64	.012	.006	—
De Luxe D-21	'41	O	H	10	18	2	13/64	.012	.006	—
Luxury Liner D-19	'41	O	H	11	19 7/16	2	13/64	.012	.006	—
De Luxe D-23	'42	O	H	10	18	2	13/64	.012	.006	—
Custom D-22	'42	O	H	11	19 7/16	2	13/64	.012	.006	—
D-25	'46	O-L	H	10	FR	2	13/64	.006	.006	—
D-24	'46	O-L	H	11	RR	2	13/64	.006	.006	—
D-25	'47	O-L	H	10	FR	2	13/64	.006	.006	—
D-24	'47	O-L	H	11	RR	2	13/64	.006	.006	—
D-25	'48	O-L	H	10	FR	2	13/64	.006	.006	—
D-24	'48	O-L	H	11	RR	2	13/64	.006	.006	—
D-30	'49	O-L	H	11(s)	RR	2	13/64	.006	.006	—
D-31, D-32	'49	O-L	H	10	FR	2	13/64	.006	.006	192,1161(b)
D34, D35, D36	'50	O-L	H	11(s)c	RR(c)	2	13/64	.006	.006	—
FORD										
V-8 85	'41	O-L	H	12	23 5/32	1 3/4	.200	.010	.005	—
V-8 85	'42	O-L	H	12	23 5/32	1 3/4	.200	.010	.005	—
De Luxe	'46	O-L	H	12	Y	1.75	.20	.010	FA	—
Super De Luxe	'46	O-L	H	12	Y	1.75	.20	.010	FA	—
De Luxe & Sup. De L.	'47	O-L	H	12	X	1 3/4	5/16	.010	FA	—
De Luxe & Sup. De L.	'48	O-L	H	12	X	1 3/4	5/16	.010	FA	—
V-8	'49	B	Ds	10	23 1/2	†††	3/16	.008	.008	284,287
V-8	'50	O-L	H	10	—	2.25f	.187	.010	FA	284,287

For key to abbreviations see page 102

BRAKES AND BRAKE LININGS

Make and Model	Year	Brake Mechanism—Make	Brake Mechanism—Type	Drum Diameter	Lining—Length per Wheel	Lining—Width	Lining—Thickness	Clearance—Toe	Clearance—Heel	F.M.S. Number
FRAZER										
F-47	'47	B	H	11	m	2	13/64	.008	.008	—
F-47-47C-485-486	'48	B	H2	11	225/32	2	13/64	.010	.010	—
F-495, 496	'49	B,Wa	H	11	225/32	2	13/64	.010	.010	—
F-495, 496	'50	B,Wa	H	11	225/32	2	13/64	.010	.010	—
HILLMAN MINX (English)										
Mark III	'49	L	H	8	—	1 1/2	—	Ø	Ø	—
Mark IV	'50	L	H	8	—	1 1/2	—	—	—	—
HUDSON										
Six-10	'41	B	H	10	1927/32	1 3/4	3/16	.010	.010	—
Six-11, 18	'41	B	H	10	1927/32	1 3/4	3/16	.010	.010	—
Six-12	'41	B	H	10	2119/32	1 3/4	3/16	.010	.010	—
Eight	'41	B	H	11	2119/32	1 3/4	7/32	.010	.010	—
Sixes	'42	B	H	10	1927/32	1 3/4	3/16	.010	.010	—
Eights	'42	B	H	11	2119/32	1 3/4	7/32	.010	.010	—
Six-51, 52	'46	B	H	10	1927/32	1 3/4	3/16	.010	.010	—
Eight-53, 54	'46	B	H	11	2119/32	1 3/4	7/32	.010	.010	—
Six-171, 172	'47	B	H	10	1927/32	1 3/4	3/16	.010	.010	—
Eight-173, 174	'47	B	H	11	2119/32	1 3/4	7/32	.010	.010	—
Series 481, 482	'48	B	Da	11	fr	(fr)	.177	.010	.010	—
Series 483, 484	'48	B	Da	11	fr	(fr)	.177	.010	.010	—
Series 491,492	'49	B	Da	11	fr	(fr)	.177	.010	.010	2015A
Series 493, 494	'49	B	Da	11	fr	(fr)	.177x	.010	.010	2015A
Series 500-504	'50	B	Da	11	fr	h	.177	.010	.010	—
HUMBER HAWK (English)										
Mark III	'49	L	L2	9	—	1.75	—	—	—	—
Hawk (Mk. III)	'49	L	H	9	—	1.75	—	—	—	—
Super Snipe	'49	L	H	12	—	1.75	—	—	—	—
Super Snipe	'49	L	H	12	—	1.75	—	—	—	—
Pullman (Mk. II)	'49	L	H	12	—	1.75	—	—	—	—
Hawk (Mk. III)	'50	L	H	9	—	1.75	—	—	—	—
Super Snipe (Mk. II)	'50	L	H	12	—	1.75	—	—	—	—
Pullman (Mk. II)	'50	L	H	12	—	1.75	—	—	—	—
JAGUAR (English)										
1 1/2 Litre. Sal.	'46-'48	G	M	12	21 1/2	1 1/2	3/16	—	—	—
2 1/2 Litre. Sal. & C.	'46-'49	G	M	14	27 1/2	1 3/4	1/4	—	—	—
3 1/2 Litre. Sal. & C.	'46-'48	G	M	14	27 1/2	1 3/4	1/4	—	—	—
2 1/2 Litre. Sal. & C.	'49	G	H	12	23	2 1/4 (fr)	1/4	—	—	—
3 1/2 Ltre. S&C. Mk.V.	'49	G	H	12	23	(fr)	1/4	—	—	—
3 1/2 Litre. XK. 120S.S.	'49	L	H	12	23	2 1/4	5/16	—	—	—
KAISER										
K-100	'47	B	H	10	m	2	13/64	.008	.008	—
K-100-101-481-482	'48	B	H2	11	225/32	2	13/64	.010	.010	—
Series K-491, 492	'49	B,Wa	H	11	225/32	2	13/64	.010	.010	—
K-491, 492	'50	B,Wa	H	11	225/32	2	13/64	.010	.010	—
LINCOLN										
Linc. & Linc. Cont.	'41	B	H	12	25.92	1 3/4	.210	.010	.010	—
Linc. & Linc. Cont.	'47	B	H	12	24	1 3/4	.210	.010	.006	—
Linc. & Linc. Cont.	'48	B	H	12	24	1 3/4	.210	.010	.006	—
Linc. & Linc. Cont.	'49	(Not distributed in Canada)								
Linc. & Linc. Cont.	'50	(Not distributed in Canada)								

For key to abbreviations see page 102

BRAKES AND BRAKE LININGS

Make and Model	Year	Brake Mechanism—Make	Brake Mechanism—Type	Drum Diameter	Lining—Length per Wheel	Lining—Width	Lining—Thickness	Clearance—Toe	Clearance—Heel	F.M.S. Number
MERCURY										
Mercury	'41	O-L	H	12	235/32	1 3/4	.200	.010	.005	—
Mercury	'42	O-L	H	12	235/32	1 3/4	.200	.010	.005	—
114 & 114X	'46	O-L	H	12	Y	1.75	.20	.010	FA	—
118	'46	O-L	H	12	Y	1.75	.20	.010	FA	—
114, 114X & 118	'47	O-L	H	12	X	1 3/4	3/16	.010	FA	—
114, 114X & 118	'48	O-L	H	12	X	1 3/4	3/16	.010	FA	—
Mercury	'49	B	Ds	11	237/8	†††	3/16	.008	.008	284, 287
Mercury	'50	O-L	H	11	(m)	(m)	.212	.010	FA	—
METEOR										
Meteor	'49	B	Ds	10	231/2	†††	3/16	.008	.008	284-, 287
Meteor	'50	O-L	H	10	—	—	.187	.010	FA	—
MG (English)										
T.C.	'48	L	H	—	—	—	—	—	—	—
Series Y	'49	L	H	9	8 1/2	1 1/2	3/16	—	—	—
Series TD	'50	L	H	9	8.46	1.47	aa	—	—	—
Series Y	'50	L	H	9	8.46	1.47	aa	—	—	—
MONARCH										
V-8	'46	O-L	H	12	Y	1.75	.20	.010	FA	—
V-8	'47	O-L	H	12	X	1 3/4	3/16	.010	FA	—
V-8	'48	O-L	H	12	X	1 3/4	3/16	.010	FA	—
V-8	'49	B	Ds	11	237/8	†††	3/16	.008	.008	284, 287
V-8	'50	O-L	H	11	—	—	.212	.010	FA	—
MORRIS (English)										
8 Series E	'48	L	H	—	—	—	—	—	—	—
10 Series M	'48	L	H	—	8 1/2	1 1/2	3/16	—	—	—
Minor	'48	L	H	7	6.54	1.22	.198	—	—	—
Oxford	'48	L	H	8	7.5	1.47	.203	—	—	—
Six	'49	L	H	10	9.42	1.72	.203	—	—	—
Minor	'49	L	H	7	6.54	1.22	.198	—	—	—
Oxford	'49	L	H	8	7.5	1.47	.203	—	—	—
Six	'50	L	H	10	9.42	1.72	.203	—	—	—
Minor	'50	L	H	7	6.54	1.22	.198	—	—	—
Oxford	'50	L	H	8	7.5	1.47	.203	—	—	—
NASH										
Ambassador 600	'41	B	H	9	201/2	1 3/4	3/16	.010	.010	—
Ambassador 6	'41	B	H	10	22	2	3/16	.010	.010	—
Ambassador 8	'41	B	H	10	22	2	3/16	.010	.010	—
4240—"6"	'42	B	H	9	201/2	1 3/4	3/16	.010	.010	—
4260—"6"	'42	B	H	10	22	2	3/16	.010	.010	—
4280—"8"	'42	B	H	10	22	2	3/16	.010	.010	—
Series 4640	'46	B	H	9	201/2	1 3/4	3/16	.010	.010	—
Series 4660	'46	B	H	10	22	2	3/16	.010	.010	—
Series 4740	'47	B	H	9	201/2	1 3/4	3/16	.010	.010	—
Series 4760	'47	B	H	10	22	2	3/16	.010	.010	—
Series 4840	'48	B	H	9	bbb	2	5/32	.004	.088	—
Series 4860	'48	B	H	10	bb	2	3/16	.004	.008	—
Series 4940	'49	B	H	9	171/2	bbb	3/16	.015	.015	1221

For key to abbreviations see page 102

BRAKES AND BRAKE LININGS

Make and Model	Year	Brake Mechanism—Make	Brake Mechanism—Type	Drum Diameter	Lining—Length per Wheel	Lining—Width	Lining—Thickness	Clearance—Toe	Clearance—Heel	F.M.S. Number
NASH—(Continued)										
Series 4960	'49	B	H	10	22	2	3/16	015	.015	237
Canadian Statesman	'50	Mc	H	11	10 5/8	1 3/4	3/16	—	—	—
Statesman (U.S.)	'50	B	H	9	—	—	—	—	—	—
Ambassador (U.S.)	'50	B	H	10	—	—	—	.015	.015	—
Rambler (U.S.)	'50	B	H	8	—	R	—	—	—	—
OLDSMOBILE										
Six	'41	O	H	11	22 5/8	1 3/4	3/16	w	w	—
Eight	'41	B	H	11	21 5/16	2	3/16	.015	.015	—
Six	'42	O	H	11	22 5/8	1 3/4	3/16	w	w	—
Eight	'42	B	H	11	21 5/16	2	3/16	.015	.015	—
Six	'46	B	H	11	21 5/16	i	3/16	.015	.015	—
Eight	'46	B	H	11	21 5/16	z	3/16	.015	.015	—
Six	'47	B	H	11	21 5/16	i	3/16	.015	.015	—
Eight	'47	B	H	11	21 5/16	K	3/16	.015	.015	—
Six	'48	B	H	11	21 5/16	i	3/16	.015	.015	—
Eight	'48	B	H	11	21 5/16	K	3/16	.015	.015	—
Six	'49	Va	H	11	21 5/16 o	i	e	.015	.015	2006, 292
Eight	'49	Va	H	11	21 5/16	i	e	.015	.015	2006, 292
Six ("76")	'50	Va	H	11	21 5/16 O	****	e	.015	.015	—
Eight ("88")	'50	Va	H	11	21 5/16	(i)	e	.015	.015	—
PACKARD										
110	'41	B	H	11	22 5/8	1 3/4	3/16	.015	015	—
120	'41	B	H	12	24 1/2	1 3/4	3/16	.015	.015	—
Super 8	'41	B	H	12	24 1/2	2	3/16	.015	.015	—
"6"—2000	'42	B	H	dd	aa	1 3/4	3/16	.015	.015	—
"8"—2001	'42	B	H	12	24 1/2	1 3/4	3/16	.015	.015	—
"Super 8"—2003, 6	'42	B	H	12	24 1/2	2 1/2	3/16	.015	.015	—
2100	'46	—	H2	12	†	1 3/4	3/16	—	—	—
2101 & 2111	'46	—	H2	12	††	1 3/4	3/16	—	—	—
2103	'46	—	H2	12	††	K	3/16	—	—	—
2126	'46	—	H2	12	†	2 1/2	3/16	—	—	—
2100	'47	H2	12C	11C	××	1 3/4	3/16	—	—	—
2101 & 2111	'47	H2	12C	12C	††	1 3/4	3/16	—	—	—
2103, 2106 & 2126	'47	H2	12C	12C	+	Z	3/16	—	—	—
2130	'47	H2	12C	12C	+	Z	3/16	—	—	—
2201, 2211	'48	—	H2	12C	11 1/2	1 3/4	3/16	—	—	—
2202, 2232	'48	—	H2	12C	11 1/2	1 3/4	3/16	—	—	—
2206, 2233	'48	—	H2	12C	11 1/2	2 1/4	3/16	—	—	—
2301	'49	O-L	H2	12	24 1/2	1 3/4	3/16	—	—	2003
2302, 2332	'49	O-L	H2	12	24 1/2	1 3/4	3/16	—	—	221
2306, 2333	'49	O-L	H2	12	24 1/2	1 3/4	3/16	—	—	221
2301	'50	O-L	H2	12	24 1/2	1 3/4	3/16	—	—	—
2302, 2332	'50	O-L	H2	12	24 1/2	1 3/4	3/16	—	—	—
2306, 2333	'50	O-L	H2	12	24 1/2	1 3/4	3/16	—	—	—
PLYMOUTH										
Roadking P-11	'41	O	H	10	18	2	13/64	.012	.006	—
De Luxe P-12	'41	O	H	10	18	2	13/64	.012	.006	—
De Luxe P-14	'42	O	H	10	18	2	13/64	.012	.006	—
P-15	'46	O-L	H	10	FR	2	13/64	.006	.006	—
P-15	'47	O-L	H	10	FR	2	13/64	.006	.006	—

(Continued on page 99)

For key to abbreviations see page 102

BRAKES AND BRAKE LININGS

Make and Model	Year	Brake Mechanism—Make	Brake Mechanism—Type	Drum Diameter	Lining—Length per Wheel	Lining—Width	Lining—Thickness	Clearance—Toe	Clearance—Heel	F.M.S. Number
PLYMOUTH (Continued)										
P-15	'48	O-L	H	10	FR	2	13/64	.006	.006	—
P-17, P-18	'49	O-L	H	10	FR	2	13/64	.006	.006	1106A
P-19, P-20	'50	O-L	H	10	FR	2	13/64	.006	.006	—
PONTIAC										
Sixes	'41	O	H	11	225/8	13/4	5/16	w	w	—
Sixes	'42	O	H	11	225/8	13/4	5/16	w	w	—
Six	'46	O	H	11	225/8	13/4	5/16	w	w	—
Eight	'46	O	H	11	215/16	i	5/16	.015	.015	—
Six & Eight	'47	O	H	11	215/16	i	5/16	.015	.015	—
Six	'48	O	H	11	225/8	13/4	5/16	w	w	—
Eight	'48	O	H	11	215/16	i	5/16	.015	.015	—
Six...2000, 2200, 2500	'49	O	H	11	215/16	(fr)§	.221x	—	—	292A, 2015A
Eight	'49	O	H	11	215/16	(fr)	.221x	—	—	292A, 2015A
Six, 2000, 2200, 2500	'50	Ds-hk	H	11	xx	(fr)§	5/16	—	—	—
Eight-2700	'50	Ds-hk	H	11	xx	(fr)§	5/16	—	—	—
PREFECT (English)										
Four Cylinder	'49	G	FW	10	17.44	1.25	.17 - .010		.010	—
Four Cylinder	'50	G	M	10	17.54	1.25	13/64	.010	.010	—
RILEY (English)										
100 hp, 2½-Litre	'49	G	HM	—	—	—	—	—	—	—
1½ Litre	'46-'50	G	HM	10	—	13/4	5/16	—	—	—
2½ Litre	'47-'50	G	HM	12	—	1.656	5/16	—	—	—
ROVER (English)										
75	'49	G	HM	12	—	—	—	—	—	—
75	'50	G	H	11	—	1.75	.1875	jc	jc	—
Land Rover	'50	G	H	10	—	1.5	.1875	jc	jc	—
STUDEBAKER										
Commander 6-11A	'41	L	H	11	191/16	2	5/16	.010	.005	—
President 8-7C	'41	L	H	11	1911/16	21/4	5/16	.010	.005	—
Champion 6-3G	'41	L	H	9	173/4	13/4	5/16	.010	.005	—
Commander 6-12A	'42	Wa	H	11	1911/16	2	5/16	.010	.005	—
President 8-8C	'42	Wa	H	11	1911/16	21/4	5/16	.010	.005	—
Champion 6-4G	'42	Wa	H	9	173/4	13/4	5/16	.010	.005	—
Skyway, 5G	'46	Wa	H	9	173/4	13/4	5/16	.010	.005	—
Champion 6-G	'47	Wa	H	9	18.5	2	5/16	SC	SC	—
Commander 14A	'47	Wa	H	11	221/4	2	5/16	SC	SC	—
Champion 7G	'48	Wa	H	9	18.5	2	5/16	SC	SC	—
Commander 15A	'48	Wa	H	11	221/4	2	5/16	SC	SC	—
Champion-8G	'49	Wa	H	9	181/2	2	5/16	SC	SC	1215
Commander-16A	'49	Wa	H	11	221/4	2	5/16	SC	SC	1216
Champion 9G	'50	L	H	9	18.5	2	5/16	SC	SC	—
Commander 17A	'50	L	H	11	221/4	2	5/16	SC	SC	—

N.B. Fleetleaders (1941-2-6-7-8) are 20 and 22 Series; Torpedo 6 & 8 (1941-2-6-7-8) are 25 and 27 Series respectively. Streamliner 6 & 8 (1941-2-6-7-8) are 26 and 28 Series respectively; Streamliner 6 & 8 (1948) not distributed in Cnnada.

For key to abbreviations see page 102

BRAKES AND BRAKE LININGS

Make and Model	Year	Brake Mechanism—Make	Brake Mechanism—Type	Drum Diameter	Lining—Length per Wheel	Lining—Width	Lining—Thickness	Clearance—Toe	Clearance—Heel	F.M.S. Number
SUNBEAM TALBOT (English)										
90	'49	L	H	10	—	—	—	—	—	—
90	'50	L	H	10	—	1.75	—	—	—	—
TRIUMPH (English)										
Series TRD (1800)	47-48	G	H	—	—	—	—	—	—	—
Series TRA	'49	G	H	—	—	—	—	—	—	—
VANGUARD (English)										
Sedan & Est. car	'49	L	H	9	17 1/4	1 3/4	1 3/16	—	—	—
Sedan & Est. Car	'50	L	H	9	17 1/4	1 3/4	1 3/16	—	—	—

For key to abbreviations see page 102

BRAKES AND BRAKE LININGS

Make and Model	Year	Brake Mechanism—Make	Brake Mechanism—Type	Drum Diameter	Lining—Length per Wheel	Lining—Width	Lining—Thickness	Clearance—Toe	Clearance—Heel	F.M.S. Number
VAUXHALL LIP (English)										
Velox	'49	LH	—	9 1/8	18 1/4	V	—	(T)	—	
Velox	'50	LH	—	9 1/8	18 1/4	V	—	(T)	—	
WILLYS										
Willys Americar	'41	B	H	9	18 5/8	1 3/4	3/16	.008	.005	
Willys Americar	'42	B	H	9	16 53/64	1 3/4	3/16	.008	.005	
CJ-2A Uni Jeep	'45	B	H	9	j	1 3/4	.210	—	—	
CJ-2A Uni. Jeep	'47	B	H	9	j	1 3/4	.210	.008	.005	
CJ-2A	'48	B	H	9	16 53/64	1 3/4	.206	—	—	
2WD, 4WD	'48	B	H	11	22 1/16	2	.182	—	—	
4-63, 6-63	'48	B	H	10	19	1 3/4	.182	—	—	
CJ-2AXX	'49	B	H	9	16 53/64	1 3/4	.206	.008	.005	
2 WD, 4WD	'49	B	H	11	22 1/16	2	.182	—	—	
4 63, 6 63	'49	B	H	10	19	1 3/4	.182	—	—	
CJ-3AXX	'49	B	H	9	16 53/64	1 3/4	.206	.008	.005	
4-73 Sta. Wgn.	'50	B	H	10	19	1 3/4	.182-.192	—	—	
4x4-63 Sta. Wgn.	'50			11	22 1/16	2	.182-.192			
4x4-63 Sta. Wgn.	'50	—	—	11	22 3/16	2	.182-.192	—	—	
6-73 Sta. Wgn.	'50	B	H	10	19	1 3/4	.182-.192	—	—	
4-73 VJ Jeepster	'50	B	H	10	19	1 3/4	.182-.192	—	—	
6-73 VJ Jeepster	'50	B	H	10	19	1 3/4	.182-.192	—	—	
WOLSELEY (English)										
Four-Fifty	'49	G	HM	—	—	—	—	—	—	
Six-Eighty	'49	G	HM	—	—	—	—	—	—	
Six-Eighty	'48-'50	L	H	10	9.42	1.72	.203	—	—	
Fo ur-Fifty	'48-'50	L	H	9	8.46W	1.47	.203	—	—	

BRAKES AND BRAKE LININGS—DRIVESHAFT

Make and Model	Year	Hand Brake—Drum Diameter	Lining—Length	Lining—Width	Lining—Thickness	Lining—Clearance (Minimum—Maximum)
CHRYSLER						
Royal 6 C-28	'41	6	17 1/16	2	5/32	.015
R.Winds'r C-28W	'41	7	20 1/8	2	5/32	.015
N. Yorker 8 C-30	'41	7	20 1/8	2 1/2	5/32	.015
Crown Cus.C-33	'41	7	20 1/8	2 1/2	5/32	.015
Royal 6 C-34	'42	6	17 1/16	2	5/32	.015
R. W'dsor C-34W	'42	7	20 1/8	2	5/32	.015
N.Yorker 8 C-36	'42	7	20 1/8	2 1/2	5/32	.015
Crown Cus. C-37	'42	7	20 1/8	2 1/2	5/32	.015
C-38W Windsor	'46	7	20	2 1/2	5/32	.015-.020
C-38S Royal	'46	6	16 11/16	2	5/32	.015-.020
Six C-38W, C-38S	'47	7A	20AA	2 1/2a	5/32	.015-.020
Eight C-39, C-40	'47	7	20	2 1/2	5/32	.015-.020
Six C-38W, C-38S	'48	7A	20AA	2 1/2a	5/32	.015-.020
Eight C-39, C-40	'48	7	20	2 1/2	5/32	.015-.020
Six, C-45	'49	7	20	2 1/2	5/32	.015-.020
Eight, C-46, C-47	'49	7	20	2 1/2	5/32	.015-.020
Six & Eight	'50	7	20	2 1/2	5/32	.015-.020

For key to abbreviations see page 102

BRAKES AND BRAKE LININGS—DRIVESHAFT

Make and Model	Year	Hand Brake Drum Diameter	Lining—Length	Lining—Width	Lining—Thickness	Lining—Clearance (Minimum-Maximum)
DE SOTO						
Six S-8	'41	6	17 1/16	2	5/32	.015
Six S-10	'42	7	20 1/8	2	5/32	.015
S-11	'46	7	20	2 1/2	5/32	.015-.020
S-11	'47	7	20	2 1/2	5/32	.015-.020
S-11	'48	7	20	2 1/2	5/32	.015-.020
S-13 Custom	'49	7	20	2 1/2	5/32	.015-.020
Six	'50	7	20	2 1/2	5/32	.015-.020
DODGE						
Kingsway D-20	'41	6	17 1/16	2	5/32	.015
De Luxe D-21	'41	6	17 1/16	2	5/32	.015
Lux. Liner D-19	'41	6	17 1/16	2	5/32	.015
De Luxe D-23	'42	6	17 1/16	2	5/32	.015
Custom D-22	'42	6	17 1/16	2	5/32	.015
D-25	'46	6	16 11/16	2	5/32	.015-.020
D-24	'46	6	16 11/16	2	5/32	.015-.020
D-25	'47	6	16 11/16	2	5/32	.015-.020
D-24	'47	6	16 11/16	2	5/32	.015-.020
D-25	'48	6	16 11/16	2	5/32	.015-.020
D-24	'48	6	16 11/16	2	5/32	.015-.020
D-30	'49	6	16 11/16	2	5/32	.015-.020
D-31, D-32	'49	6	16 11/16	2	5/32	.015-.020
D34, 35, 36	'50	6	16 11/16	2	5/32	.015-.020
PLYMOUTH						
Roadking P-11	'41	6	17 1/16	2	5/32	.015
DeLuxe P-12	'41	6	17 1/16	2	5/32	.015
De Luxe P-14	'42	6	17 1/16	2	5/32	.015
P-15	'46	6	16 11/16	2	5/32	.015-.020
P-15	'47	6	16 11/16	2	5/32	.015-.020
P-15	'48	6	16 11/16	2	5/32	.015-.020
P-17, P-18	'49	6	16 11/16	2	5/32	.015-.020
P19, 20	'50	6	16 11/16	2	5/32	.015-.020
WILLYS						
CJ-2A Uni. Jeep	'45	8	16 1/4	1 3/4	.210	—
CJ-2A Uni. Jeep	'47	8	16 1/4	1 3/4	.210	—
CJ-2AXX	'49	8	8 1/8W	1 3/4	.205-.216	—
CJ-3AXX	'49	8	8 1/8W	1 3/4	.205-.216	(W

ABBREVIATIONS

a—C38S 2″.
aa—Lining thickness .203″-.193″.
@—Plus or minus .005″
A—C38S 6″.
AA—C38S 16 11/16″.
b—Primary 9 15/16″; secondary 12 3/4″.
(b)—Bonded
bb—Primary 11″; secondary 11″.
bbb—Primary 10″; secondary 7 1/2″.
B—Bendix.
c—D35, D36 drum diameter 10″.
(c)—D35, D36 lining length—front wheels 21″; rear 18 1/2″.
cc—Primary 10″; secondary 12 15/16″.
C—Centrifuse.
d—Left front wheel 1 7/8″; other wheels 2 1/2″.
dd—Front 12″; rear 11″.
Da—Duo-automatic.
Ds—Duo Servo.
e—.221-.231.
f—Lining width, rear, 1.75″.
fr—Front 21.32″; rear 20.87″.
(fr)—Front 2 1/4″; rear 1 3/4″.
F—Models 60, 61, 62—front 2 1/4″; rear 2″. Model 75—front 2 1/4″; rear 2 1/2″.
FA—Floating anchors, self-adjusting.
FR—Front wheels 21″; rear 18 1/2″.
FW—Floating wedge.
g—H serial numbers Bendix; L serial numbers Wagner.
GH—Goodyear Hawley, hydraulic.
h—Model 500 lining width—front, 1 3/4, rear 1 3/4. Model 501, front 2 1/4, rear 1 3/4.
hk—Huck on series 2000, 2200 Pontiac.
H—Hydraulic.
H2—Hydraulic two shoes.
HM—Hydro-mechanical.
(i)—Front 2 1/2″; rear 2″.
j—Forward shoe 10 1/32″; reverse 6 39/64″.
jc—Just clear.
J—Forward shoe 10 7/8″; reverse 6 39/64″.
K—Front 2 1/4″; rear 2″.
L—Lockheed.
m—Front 12 1/4″; rear 10 1/32″.
(m)—Primary shoe 9.28; secondary 11.93.
M—Mechanical.
Mc—Mckinnon.
N—Not applicable.
o—Rear 24″.
O—Own.
O-L—Own Lockheed type.
p—Front 25 1/16″; rear 22 3/16″.
P—Width 2″; thickness 13/64″; front wheels 12 9/16″; rear 12-9/16″. Front shoe 9 5/8″.
q—Front wheel, both shoes .006″; rear wheel, front shoe .006″; rear .007″.
R—Rambler (U.S.) front primary 1 3/4″ wide; rear primary 1 1/4″. Front secondary 1 1/2″; rear secondary″.
RR—Front wheels 23″; rear 20 5/8″.
RS—Front wheels 25 1/8″; rear 22 3/16″.
(s)—Seven passenger sedan—12.
SC—Self-centering.
Va—Various.
w—Tighten to slight drag, then back off four notches.
W—Each shoe.
Wa—Wagner.
(W)—Back off seven notches on adjustment.
x—Minimum.
xx—11/32″—r primary; 11 31/32—4 secondary.
X—Forward shoe 13 1/8″; rear 10 5/32″.
XX—Models CJ-2A and CJ-3A only models using independent handbrake.
y—Primary 13.18″; secondary 10.1″.
Y—Primary 13.625″; secondary 10.3125″.
Z—Primary, front 2 1/4″; rear 2″. Secondary, front 2 1/4″; rear 2″.
*—With Simplimatic transmission 20 1/8″.
**—Models 60, 61, 62 front 2″; rear 2 1/4″. Model 75, front 2 1/2″; rear 2 1/4″.
***—.187-.194.
****—Front 2″, rear 1 3/4″.
†—Primary, front 11 1/2″; rear 10 5/8″. Secondary, front 13″; rear 12″.
††—Primary 11 1/2″; secondary 13″
†††—Front 2 1/4″; rear 1 3/4″.
‡—8.992-9.002.
§—Series 2000, 2200—lining length 20 5/8″; width 1 3/4″; thickness .187-.194″.
∅—To adjust, tighten fully, back off 3 clicks.
XX—Primary 10 5/8″; secondary 12″.
+—Primary, front 11 1/2″; rear 10 5/8″. Secondary, front 13″; rear 12″.

MOTOR MAGAZINE

SERVICE AND LEADERSHIP IN CANADA

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PASS THIS ISSUE ALONG TO THE FOLLOWING MEN →

1953 Chev. car. M.12-11. tappet clearance .008 - .016 in. — ex.

VALVES AND VALVE TIMING

Make and Model	Year	Angle of Seat—Intake	Stem to Guide Clearance Intake (After 1949) Size of Valve Head	Angle of Seat—Exhaust	Stem to Guide Clearance Exhaust (After 1949) Size of Valve Stem	Tappet Clearance—Intake (Min.-Max.)	Tappet Clearance—Exhaust (Min.-Max)	Clearance for Valve Timing Intake	Clearance for Valve Timing Exhaust	Valve Timing—Intake Opens (Degrees)	Valve Timing—Exhaust Closes (Degrees)
ANGLIA (English)											
Four Cylinder	'49	45	.0015-.0035	45	.0015-.0035	.0115-.0135	.015-.017	—	—	9 30'B	6 30'A
Four Cylinder	'50	45	1.108-1.118	45	.2485-.2495	.011-.013C	.015-.017C	—	—	9 30B	6 30A
AUSTIN (English)											
A-40	'48	45	—	45	—	.015	.015	—	—	5B	—
A-40 Devc n & Dorset	'49	45	.0015-.0019	45	.0015-.0019	.015	.015	.021	.021	5B	10A
A-40 Dev. & Dorset	'50	45	1 3/16-1 5/16	45	.310	.015@	.015@	.021	.021	5B	10A
BUICK											
Special 44; Super 45	'41	45	.0015	45	.0021	.015H	.015H	.004	—	13B	22A
Series 46, 47, 49	'41	45	.0015	45	.0021	.015H	.015H	.004	—	14B	25A
Series 44	'42	45	.0015	45	.0021	.015H	.015H	.004	—	13B	22A
Series 46	'42	45	.0015	45	.0021	.015H	.015H	.004	—	14B	25A
Series 50	'46	45	.0020	45	.0020	.015H	.015H	.015	—	13B	22A
Series 70	'46	45	.0020	45	.0020	.015H	.015H	.015	—	14B	25A
Series 40	'47	45	.0015-.0035	45	.0021-.0039	.015H	.015H	.015	.015	13B	22A
Series 50	'47	45	.0015-.0035	45	.0021-.0039	.015H	.015H	.015	.015	13B	22A
Series 70	'47	45	.0015-.0035	45	.0021-.0039	.015H	.015H	.015	.015	14B	25A
Series 40, 50, 70	'48	(Not distributed in Canada)									
Series 40, 50, 70	'49	(Not distributed in Canada)									
Series 40, 50, 70	'50	(Not distributed in Canada)									
CADILLAC											
All Series	'41	45	.0023	45	.0033	Automatic Take-up			—	TDC	10A
All Series	'42	45	.0023	45	.0033	Automatic Take-up			—	TDC	10A
"V" Eight	'46	45	.0023	45	.0033	Automatic Take-up			—	TDC	10A
Eight	'47	45	.0005-.0025	45	.0015-.0035	Automatic Take-up			—	TDC	10A
V-8	'48	(Not distributed in Canada)									
V-8	'49	(Not distributed in Canada)									
V-8	'50	(Not distributed in Canada)									
CHEVROLET											
Six	'41	30	.0010	30	.0020	.006H	.013H	a	a	3B	5A
Six	'42	30	.0010	30	.0020	.006H	.013H	a	a	3B	5A
Six	'46	30	.0010	30	.0020	.006-.008@	.103-.015@	a	a	3B	5A
Six	'47	30	.001-.0027	30	.002-.0037	.006-.008@	.013-.015@	a	a	3B	5A
Six	'48	30	.001-.0027	30	.002-.0037	.006@	.013@	a	a	1A	9A
Six	'49	30	.001-.0027	30	.002-.0037	.006H	.013H	.006H	.013H	1A	9A
Six	'50	30	—	45	.002-.0037	.006H	.013H	.006H	a	1A	9A
CHRYSLER											
Royal 6 C-28	'41	45	.0015	45	.0015	.008H	.010H	.014	—	12B	6A
New York. 8 C-30	'41	45	.0015	45	.0015	.008H	.010H	.011	.014	6B	12A
Crown Imp. C-33	'41	45	.0015	45	.0015	.008H	.010H	.011	.014	6B	12A
Royal 6 C-34	'42	45	.0015	45	.0015	.008H	.010H	.014	—	12B	6A
New York. 8 C-36	'42	45	.0015	45	.0015	.008H	.010H	.011	.014	6B	12A
Crown Imp. C-37	'42	45	.0015	45	.0015	.008H	.010H	.011	.014	6B	12A
C-38W, C-38S	'46	45	.001-.003	45	.003-.005	.008H	.010H	.014C	.014	12B	6A
C-38W, C-38S	'47	45	.001-.003	45	.003-.005	.008H	.010H	.014C	.014C	12B	6A
C-39, C-40	'47	45	.0015-.0035	45	.002-.004	.008H	.010H	.014C	.014C	12B	6A
C-38W, C-38S	'48	45	.001-.003	45	.003-.005	.008H	.010H	.014C	.014C	12B	6A
C-39, C-40	'48	45	.0015-.0035	45	.002-.004	.008H	.010H	.014C	.014C	12B	6A
Six, C-45	'49	45	.001-.003	45	.003-.005	.008H	.010H	.014C	.014C	12B	6A

(Continued on page 107)

For key to abbreviations see page 113

VALVES AND VALVE TIMING

Make and Model	Year	Angle of Seat—Intake	Stem to Guide Clearance Intake (After 1949) Size of Valve Head	Angle of Seat—Exhaust	Stem to Guide Clearance Exhaust (After 1949) Size of Valve Stem	Tappet Clearance—Intake (Min.-Max.)	Tappet Clearance—Exhaust (Min.-Max)	Clearance for Valve Timing Intake	Clearance for Valve Timing Exhaust	Valve Timing—Intake Opens (Degrees)	Valve Timing—Exhaust Closes (Degrees)
CHRYSLER—(Continued)											
Eight, C-46, C-47	'49	45	.0015-.0035	45	.002-.004	.008H	.010H	.014C	.014C	12B	6A
Six	'50	45	1 23/32 I-1 17/32 E	45	.340-.3415I .3385-.3405E	.008H	.010H	.014C	.014C	12B	6A
Eight	'50	45	1 17/32 I-1 11/32 E	45	.340-.341I .3395-.3405E	.008H	.010H	.014C	.014C	12B	6A
CROSLEY											
CC, (Up to 41547)	'47	45	.0015-.003	45	.002-.004	.005-.006	.006-.007	.007-.009	.009	5B	5A
CC, CD (to 106039)	'48	45	.0015-.003	45	.002-.004	.005-.006	.006-.007	.007-.009	.009	5B	5A
CD (After 106039)	'49	45	.0015-.003	45	.002-.004	.005-.006	.006-.007	.007-.009	.009	5B	5A
Crosley	'50	45	1 11/64 -1 3/64	45	.3135-.3140I .3125-.3130E	.004-.006C	.007-.009C	.004-.006C	.007-.009C	5B	5A
DE SOTO											
Six S-8	'41	45	.0015	45	.0015	.008H	.010H	.014	—	12B	6A
Six S-10	'42	45	.0015	45	.0015	.008H	.010H	.014	—	12B	6A
S-11	'46	45	.001-.003	45	.003-.005	.008H	.010H	.014C	—	12B	6A
S-11	'47	45	.001-.003	45	.003-.005	.008H	.010H	.014C	.014C	12B	6A
S-11	'48	45	.001-.003	45	.003-.005	.008H	.010H	.014C	.014C	12B	6A
S-13 Custom	'49	45	.001-.003	45	.003-.005	.008H	.010H	.014C	.014C	12B	6A
S14	'50	45	1 23/32 I-1 17/32 E	45	.340-.3415I .3385-.3405E	.008H	.010H	.014C	.014C	12B	6A
DODGE											
Six D-19, -20, -21	'41	45	.0010	45	.0030	.008H	.010H	.014	—	12B	6A
Six D-22, D-23	'42	45	.0015	45	.0015	.008H	.010H	.014	—	12B	6A
D-25	'46	45	.001-.003	45	.003-.005	.008H	.010H	.014C	—	12B	6A
D-24	'46	45	.001-.003	45	.003-.005	.008H	.010H	.014C	—	12B	6A
D-25	'47	45	.001-.003	45	.003-.005	.008H	.010H	.014C	.014C	12B	6A
D-24	'47	45	.001-.003	45	.003-.005	.008H	.010H	.014C	.014C	12B	6A
D-25	'48	45	.001-.003	45	.003-.005	.008H	.010H	.014C	.014C	12B	6A
D-24	'48	45	.001-.003	45	.003-.005	.008H	.010H	.014C	.014C	12B	6A
D-30	'49	45	.001-.003	45	.003-.005	.008H	.010H	.014C	.014C	12B	6A
D-31, D-32	'49	45	.001-.003	45	.003-.005	.008H	.010H	.014C	.014C	12B	6A
D34-D35-D36	'50	45	1 23/32 I-1 17/32 E	45	.340-.3415I .3385-.3405E	.008H	.010H	.014C	.014C	12B	6A
FORD											
V-8 85	'41	45	.0025	45	.0025	.0125-.0135	.0125-.0135	.015	—	TDC	6A
V-8 85	'42	45	.0025	45	.0025	.0125-.0135	.0125-.0135	.010-.012	.014-.016	TDC	6A
De Luxe	'46	45	.0025	45	.0025	.011C	.015C	—	—	TDC	6A
Super De Luxe	'46	45	.0025	45	.0025	.011C	.015C	—	—	TDC	6A
De L. & Super De L.	'47	45	.0025	45	.0025	.010-.012C	.014-.016C	.010-.012	.014-.016	TDC	6A
De L. & Super De L.	'48	45	.0025	45	.0025	.010-.012C	.014-.016C	.010-.012	.014-.016	TDC	6A
V-8	'49	45	.0015-.0035	45	.0015-.0035	.010-.012	.014-.016	—	—	TDC	6A
V-8	'50	45	1.505	45	1.505	1.75f	1.75f	.013-.015	.017-.019	5B	3A
FRAZER											
F-47	'47	30	.0008-.0026	45	.0027-.0045	.014	.014	.014	.014	10B	10A
F-47-47C-485-486	'48	30	.0008-.0026	45	.0032-.0050	TC	.014C	TC	.014	10B	10A
Series F-495, 496	'49	30	.0008-.0026	45	.0032-.005	.014C	.014C	.018	.020	10B	10A
Series F-495, 496	'50	30	—	45	—	.014C	.014C	.018	.020	10B	10A

For key to abbreviations see page 113

VALVES AND VALVE TIMING

Make and Model	Year	Angle of Seat—Intake	Stem to Guide Clearance Intake After 1949— Size of Valve Head	Angle of Seat—Exhaust	Stem to Guide Clearance Exhaust (After 1949) Size of Valve Stem	Tappet Clearance— Intake (Min.-Max.)	Tappet Clearance— Exhaust (Min.-Max)	Clearance for Valve Timing Intake	Clearance for Valve Timing Exhaust	Valve Timing— Intake Opens (Degrees)	Valve Timing— Exhaust Closes (Degrees)
HILLMAN MINX (English)											
Mark III	'49	45	.0025-.0041	45	.0025-.0041	.010	.015	.010	.015	8B	10A
Mark IV	'50	45	1.268-1.272I 1.150-1.154E	45	.3114-.3120	.010C	.015C	.010	.015	8B	10A
HUDSON											
Six-10****	'41	45	.0015	45	.0030	.006H	.008H	.010	—	10⅜B	18¼A
Six 10***	'41	45	.0015	45	.0030	.010H	.012H	.010	—	28½B	32⅜A
Six 11, 12, 18	'41	45	.0015	45	.0030	.006H	.008H	.010	—	10⅜B	18¾A
Eight	'41	45	.0015	45	.0030	.006H	.008H	.010	—	10⅜B	18¾A
"6"-20C, 20Sp	'42	45	.0015	45	.0030	.010H	.012H	.010	—	27½B	32⅛A
"6"-20P, 21, 22, 28	'42	45	.0015	45	.0030	.006H	.008H	.010	—	10⅜B	18⅜A
Eights	'42	45	.0015	45	.0030	.006H	.008H	.010	—	10⅜B	18¾A
Six-51, 52	'46	45	.0015	45	.0030	.010H	.012H	.012	.014	10.6B	18.6A
Eight-53, 54	'46	45	.0015	45	.0030	.010H	.012H	.008	.010	10.6B	18.6A
Six-171, 172	'47	45	.0015-.003	45	.003-.005	.010H	.012H	.012	.014	10.6B	18.6A
Eight-173, 174	'47	45	.0015-.003	45	.003-.005	.006H	.008H	.008	.010	10.6B	18.6A
Series 481, 482	'48	45	.0015-.003	45	.002-.004	.010	.012	.010	.012	7°18′B	7°42′A
Series 483, 484	'48	45	.0015-.003	45	.003-.005	.006	.008	.006	.008	10°40′B	18°14′A
Series 491, 492	'49	45	.0015-.003	45	.002-.004	.008	.010	.010	.012	7 18′B	7 42′A
Series 493, 494	'49	45	.0015-.003	45	.003-.005	.006	.008	.006	.008	10 40′B	18 44′A
Series 500, 501, 502	'50	45	1 53/64I-1 19/64E	45	.3402-.3412	.008H	.010H	.010	.012	7 18B	7 42A
Series 503 and 504	'50	45	1½I-1⅜E	45	.3402-.3412	.006H	.008H	.006	.008	10 40B	18 44A
HUMBER HAWK (English)											
Super Snipe Mk. II	'48	45	1.661-1.665I 1.386-1.390E	45	—	.010C	.010C	.010	.010	9B	9A
Hawk Mk. III	'49	45	1.386-1.390I 1.307-1.311E	45	—	.010C	.010C	.010	.010	13B	9A
Super Snipe Mk. II	'49	45	1.661-1.665I 1.386-1.390E	45	—	.010C	.010C	.010	.010	9B	9A
Pullman Mk. II	'49	45	1.661-1.665I 1.386-1.390E	45	—	.010C	.010C	.010	.010	9B	9A
Pullman Mk. II	'50	45	1.661-1.665I 1.386-1.390E	45	—	.010C	.010C	.010	.010	9B	9A
Hawk Mk. III	'50	45	1.386-1.390I 1.307-1.311E	45	—	.010C	.010C	.010	.010	13B	9A
Super Snipe Mk. II	'50	45	1.661-1.665I 1.386-1.390E	45	—	.010C	.010C	.010	.010	9B	9A
JAGUAR (English)											
1½ Litre Sal	'46-'48	30	.002-.004	30	.003-.005	.015	.018	.020	.020	10	10
2½ Litre S&C	'46-'48	30	.002-.004	30	.003-.005	.012	.015	.020	.020	16	16
3½ Litre S&C	'46-'48	30	.002-.004	30	.003-.005	.012	.015	.020	.020	16	16
2½ Ltre.S&C.Mk.V	'49	30	.002-.004	30	.003-.005	.012	.015	.020	.020	10	10
3½ Ltre.S&C.Mk.V	'49	30	.002-.004	30	.003-.005	.012	.015	.020	.020	10	10
3½ Ltre.XK.120 S.S.	'49	30	.002-.004	45	.002-.004	.006	.008	.010	.010	15	15
KAISER											
K-100	'47	30	.0008-.0026	45	.0027-.0045	.014	.014	.014	.014	10B	10A
K-100-101-481-482	'48	30	.0008-.0026	45	.0032-.0050	TC	.014	TC	.014	10B	10A
Series K-491, 492	'49	30	.0008-.0026	45	.0032-.005	.014C	.014C	.018	.020	10B	10A
K-491, 492	'50	30	—	45	—	.014C	.014C	.018	.020	10B	10A
LINCOLN											
Continental	'41	45	.0025	45	.0025	Hydraulic Tappets			—	10.5B	8A
Linc. & Linc. Cont.	'47	45	.0015-.0035	45	.0015-.0035	Automatic Take-up			—	10.4B	8.1A
Linc. & Linc. Cont.	'48	45	.0015-.0035	45	.0015-.0035	Automatic Take-up			—	10.4B	8.1A
Linc. & Linc. Cont.	'49	(Not distributed in Canada)									
Lin. & Linc. Cont.	'50	(Not distributed in Canada)									

For key to abbreviations see page 113

VALVES AND VALVE TIMING

Make and Model	Year	Angle of Seat—Intake	Stem to Guide Clearance Intake (After 1949) Size of Valve Head	Angle of Seat—Exhaust	Stem to Guide Clearance Exhaust (After 1949) Size of Valve Stem	Tappet Clearance—Intake (Min.-Max.)	Tappet Clearance—Exhaust (Min.-Max)	Clearance for Valve Timing Intake	Clearance for Valve Timing Exhaust	Valve Timing—Intake Opens (Degrees)	Valve Timing—Exhaust Closes (Degrees)
MERCURY											
Mercury	'41	45	.0025	45	.0025	.0125-.0135	.0125-.0135	.015	—	TDC	6A
Mercury	'42	45	.0025	45	.0025	.0125-.0135	.0125-.0135	.010-.012	.014-.016	TDC	6A
114 & 114X	'46	45	.0025	45	.0025	.011C	.015C	—	—	TDC	6A
118	'46	45	.0025	45	.0025	.011C	.015C	—	—	TDC	6A
114, 114X & 118	'47	45	.0025	45	.0025	.010-.012C	.014-.016C	.010-.012	.014-.016	TDC	6A
114, 114X & 118	'48	45	.0025	45	.0025	.010-.012C	.014-.016C	.010-.012	.014-.016	TDC	6A
Mercury	'49	45	.0015-.0035	45	.0015-.0035	.010-.012	.014-.016	—	—	10B	10A
Mercury	'50	45	1.505-1.515	45	1.505-1.515	1.75pm-.010	1.75pm-.010	.010-.012	.014-.016	10B	10A
METEOR											
Meteor	'49	45	.0015-.0035	45	.0015-.0035	.010-.012	.014-.016	—	—	TDC	6A
Meteor	'50	45	1.505	45	1.505	1.75f	1.75f	.013-.015	.017-.019	5B	3A
MG (English)											
T.C.	'48	30	.003	30	.003	.019H	.019H	—	—	11B	24A
Series Y	'49	30	.003	30	.003	.019H	.019H	—	—	11B	24A
Series TD	'50	30	3 lm I 33 m E	30	8m	.019	.019	—	—	11B	24A
Series Y	'50	30	3 lm I 33 m E	30	8m	.019	.019	—	—	11B	24A
MONARCH											
Monarch	'46	45	.0025	45	.0025	.011C	.015C	—	—	TDC	6A
Monarch	'47	45	.0025	45	.0025	.010-.012C	.014-.016C	.010-.012	.014-.016	TDC	6A
Monarch	'48	45	.0025	45	.0025	.010-.012C	.014-.016C	.010-.012	.014-.016	TDC	6A
Monarch	'49	45	.0015-.0035	45	.0015-.0035	.010-.012	.014-.016	—	—	10B	10A
V-8	'50	45	1.505-1.515	45	1.505-1.515	—	—	.010-.012	.014-.016	10B	10A
MORRIS (English)											
8 Series E	'48	45	—	45	—	.017H	.017H	.018	.01[illegible]	8B	20A
10 Series M	'48	30	—	30	—	.019H	.019H	—	—	5B	5A
Oxford	'48	45	—	45	.312	.015H	.015H	.022C	.022C	8B	20A
Minor	'48	45	—	45	7m	.017H	.017H	.023C	.023C	8B	20A
Minor	'49	45	—	45	7m	.017H	.017H	.023C	.023C	8B	20A
Six	'49	45	1.31I-1.23E	45	.50	.015H	.015H	—	8B	—	8A
Oxford	'49	45	—	45	.312	.015H	.015H	.022C	.022C	8B	20A
Six	'50	45	1.31I-1.23E	45	.50	.015H	.015H	—	8B	8B	8A
Oxford	'50	45	—	45	.312	.015H	.015H	.022C	.022C	8B	20A
Minor	'50	45	—	45	7m	.017H	.017H	.023C	.023C	8B	20A
NASH											
Ambassador 600	'41	45	.0020	45	.0020	.015H	.015H	.019	—	—	—
Ambassador 6	'41	45	.0020	45	.0020	.015H	.015H	.015	—	—	—
Ambassador 8	'41	45	.0020	45	.0020	.015H	.015H	.015	—	—	—
4240-"6"	'42	45	.0020	45	.0020	.015H	.015H	.019	—	19B	23A
4260-"6"	'42	45	.0020	45	.0020	.015H	.015H	.015	—	14B	31A
4280-"8"	'42	45	.0020	45	.0020	.015H	.015H	.015	—	14B	31A
Series 4640	'46	45	.0020	45	.0020	.015H	.015H	.019	—	—	—
Series 4660	'46	44	.0020	44	.0020	.015H	.015H	.008	—	—	—
Series 4740	'47	44	.002-.003	44	.002-.003	.015H	.015H	Varies with cams		—	—
Series 4760	'47	44	.002-.004	44	.002-.004	.015H	.015H	Varies with cams		—	—
Series 4840	'48	45	.0025	45	.0045	.015	.015	.020	.020	19B	23A
Series 4860	'48	45	.0025	45	.0045	.015	.018	.020	.022	11.6A	5A

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For key to abbreviations see page 113

VALVES AND VALVE TIMING

Make and Model	Year	Angle of Seat—Intake	Stem to Guide Clearance Intake (After 1949) Size of Valve Head	Angle of Seat—Exhaust	Stem to Guide Clearance Exhaust (After 1949) Size of Valve Stem	Tappet Clearance—Intake (Min.-Max.)	Tappet Clearance—Exhaust (Min.-Max)	Clearance for Valve Timing Intake	Clearance for Valve Timing Exhaust	Valve Timing—Intake Opens (Degrees)	Valve Timing—Exhaust Closes (Degrees)
NASH—(Continued)											
Series 4940	'49	45b	.002-.003	45b	.002-.003	.015H	.015H	.019	.019	6B	10A
Series 4960	'49	45h	.002-.004	45h	.002-.004	.015H	.015H	.0225H	.0225	8 30'B	10 30'A
Canadian Statesman	'50	—		45R	.002-.003	.015H	.015H	.019	.019	6B	10A
Statesman (U.S.)	'50	—		45R	.002-.003	.015H	.015H	.019	.019	6B	10A
Ambassador (U.S.)	'50	—		45R	.002-.004	.015H	.018H	.0225	.0225	8 30B	10 30A
Rambler (U.S.)	'50	—		45R	.002-.003	.015H	.015H	.019	.019	6B	10A
OLDSMOBILE											
Six	'41	30	.0018	45	.0025	.008H	.011H	.012	.015	5B	5A
Eight	'41	30	.0018	45	.0025	.008H	.011H	.012	.016	TDC	10A
Six	'42	30	.0018	45	.0025	.008H	.011H	.012	.015	5B	5A
Eight	'42	30	.0018	45	.0025	.008H	.011H	.012	.016	TDC	10A
Six	'46	30	.0018	45	.0025	.008H	.011H	.012	—	5B	5A
Eight	'46	30	.0018	45	.0025	.008H	.011H	.012	—	TDC	10A
Six	'47	30	.0017-.0037	45	.0024-.0042	.008H	.011H	.012	.015	5B	5A
Eight	'47	30	.0017-.0037	45	.0024-.0042	.008H	.011H	.012	.015	TDC	10A
Six	'48	30	.0017-.0037	45	.0024-.0042	.008H	.011H	.012	.015	5B	5A
Eight	'48	30	.0017-.0037	45	.0024-.0042	.008H	.011H	.012	.015	TDC	10A
Six	'49	30	.0017-.0037	45	.0024-.0042	.008H	.011H	.0125	.0155	5B	5A
Eight	'49	45	.0017-.0035	45	.0022-.0040	None	None	None	None	14B	14A
Eight ("88")	'50	45	—	45	.0027-.0045	None	None	None	None	13½B	14½A
Six ("76")	'50	30	—	45	.0029-.0047	.008H	.011H	.0125	.0155	4B	6A
PACKARD											
110	'41	30	.0025	45	.0045	.007H	.010H	.0125	.015	1B	5A
120	'41	30	.0025	45	.0045	.007H	.010H	.0125	.015	1B	5A
Super 8	'41	30	.0025	45	.0045	Automatic Take-up		—	—	4B	10A
"6"-2000	'42	30	.0025	45	.0045	.007H	.010H	.0125	.015	1B	5A
"8"-2001	'42	30	.0025	45	.0045	.007H	.010H	.0125	.015	1B	5A
Super 8-2003, 6	'42	30	.0020	45	.0040	Automatic Take-up		—	—	4B	10A
2100	'46	30	.0025	45	.0045	.007H	.010	.0125	.015	1B	5A
2101 & 2111	'46	30	.0025	45	.0045	.007H	.010	.0125	.015	1B	5A
2103 & 2126	'46	30	.0020	45	.0040	—	—	—	—	4B	10A
2100 & 2130	'47	30	.0025	45	.0045	.007H	.010H	.0125	.015	1B	5A
2101 & 2111	'47	30	.0025	45	.0045	.007H	.010H	.0125	.015	1B	5A
2103, 2106 & 2126	'47	30	.002	45	.004	Automatic Take-up		NU	NU	4B	10A
2201, 2211	'48	30	.002	45	.004	.007@	010@	.0125	.015	10B	5A
2202, 2232	'48	30	.002	45	.004	.007@	.010@	.0125	.015	10B	5A
2206, 2233	'48	30	.002	45	.004	Automatic Take-up		NU	NU	4B	10A
2301	'49	30	.002	45	.004	.007H	.010H	.0125C	NU	15B	9A
2302-2332	'49	30	.002	45	.004	.007H	.010H	.0125C	NU	15B	9A
2306, 2333	'49	30	.002	45	.004	.007H	.010H	NU	NU	4B	10A
2301	'50	30	.002	45	.004	.007H	.010H	.0125C	NU	15B	9A
2302-2332	'50	30	.002	45	.004	.007H	.010H	.0125C	NU	15B	9A
2306, 2333	'50	30	—	45	.004	.007H	.010H	NU	NU	4B	10A
PLYMOUTH											
Six P-11, P-12	'41	45	.0010	45	.0030	.008H	.010H	.014	—	12B	6A
De Luxe P-14	'42	45	.0015	45	.0015	.008H	.010H	.014	—	12B	6A
P-15	'46	45	.001-.003	45	.001-.003	.008H	.010H	.014C	—	12B	6A
P-15	'47	45	.001-.003	45	.003-.005	.008H	.010H	.014C	.014C	12B	6A
P-15	'48	45	.001-.003	45	.003-.005	.008H	.010H	.014C	.014C	12B	6A
P-17, P-18	'49	45	.001-.003	45	.003-.005	.008H	.010H	.014C	.014C	12B	6A
P-19, P-20	'50	45	1 3/32 I-1 17/32 E	45	—	.008H	.010H	.014C	.014C	12B	6A

For key to abbreviations see page 113

VALVES AND VALVE TIMING

Make and Model	Year	Angle of Seat—Intake	Stem to Guide Clearance Intake (After 1949) Size of Valve Head	Angle of Seat—Exhaust	Stem to Guide Clearance Exhaust (After 1949) Size of Valve Stem	Tappet Clearance—Intake (Min.-Max.)	Tappet Clearance—Exhaust (Min.-Max)	Clearance for Valve Timing Intake	Clearance for Valve Timing Exhaust	Valve Timing—Intake Opens (Degrees)	Valve Timing—Exhaust Closes (Degrees)
PONTIAC											
Sixes	'41	30	.0006	45	.0006	.012H	.012H	.015	—	5B	5A
Sixes	'42	30	.0006	45	.0006	.012H	.012H	.015	—	5B	5A
Six	'46	30	.0006	45	.0006	.011-.013H	.011-.013H	.012	—	5B	5A
Eight	'46	30	.0006	45	.0006	.011-.013H	.011-.013H	.012	—	5B	5A
Six	'47	30	.0006	45	.0006	.011-.013H	.011-.013H	.015	—	5B	5A
Eight	'47	30	.0006	45	.0006	.011-.013H	.011-.013H	.015	—	5B	5A
Six	'48	30	.0006	45	.0006	.011-.013H	.011-.013H	.015	—	5B	5A
Eight	'48	30	.0006	45	.0006	.011-.013H	.011-.013H	.015	—	5B	5A
Six 2000, 2200, 2500	'49	30	F-.0006	45	F-.0006	.011-.013H	.011-.013H	.011-.013H	.011-.013H	5B	5A
Eight	'49	30	F-.0006	45	F-.0006	.011-.013H	.011-.013H	.011-.013H	.011-.013H	5B	5A
Six 2000, 2200, 2500	'50	30	—	45	—	.011-.013H	.011-.013H	.011-.013H	.011-.013H	5B	5A
Eight-2700	'50	30	—	45	—	.011-.013H	.011-.013H	.011-.013H	.011-.013H	5B	5A
PREFECT (English)											
Four Cylinder	'49	45	.0015-.0035	45	.0015-.0135	.0115-.0135	.015-.017	—	—	9 30'B	6 30'A
Four Cylinder	'50	50	1.108-1.118	45	.2485-.2495	.011-.013C	.015-.017C	—	—	9½B	6½A
RILEY (English)											
100 hp. 2½-Litre	'49	45	—	45	—	.003H	.004H	—	—	17B	20A
1½ Litre	'46-'50	45	17/16r	45	5/16r	.003H	.004H	—	—	9B	20A
2½ Litre	'47-'50	45	1.830r	45	.3125(r)	.003H	.004H	—	—	17B	20A
ROVER (English)											
75	'49	30	45	—	—	.010	.012	.010	.012	9B	10A
75	'50	30	1.7	45	.3425	.008	.012	.008	.012	9B	16A
Land Rover	'50	30	1.7	45	.3425	.010	.012	.010	.012	9B	16A
STUDEBAKER											
Commander 6, 11-A	'41	45	.0015	45	.0015	.016C	.016C	.020	—	15B	10A
President 8, 7-C	'41	45	.0010	45	.0010	.016C	.016C	.020	—	15B	10A
Champion 6, 3-G	'41	45	.0010	45	.0010	.016C	.016C	.020	—	15B	10A
Commander 6, 12-A	'42	45	.0015	45	.0015	.016C	.016C	.020	—	15B	10A
President 8, 8-C	'42	45	.0010	45	.0010	.016C	.016C	.020	—	15B	10A
Champion 6, 4-G	'42	45	.0010	45	.0010	.016C	.016C	.020	—	15B	10A
Skyway, 5-G	'46	45	.0010	45	.0010	.016C	.016C	.020	—	15B	10A
Champion, 6-G	'47	45	.001-.0035	45	.001-.0035	.016C	.016C	.020	.020	15B	10A
Commander, 14-A	'47	45	.001-.0035	45	.001-.0035	.016C	.016C	.020	.020	15B	10A
Champion 7G	'48	45	.0015-.0035	45	.0015-.0035	.016C	.016C	.020	.020	15B	10A
Commander 15A	'48	45	.0015-.0035	45	.0015-.0035	.016C	.016C	.020	.020	15B	10A
Champion 8-G	'49	45	.0015-.0035	45	.0015-.0035	.016C	.016C	.020	.020	15B	10A
Commander 16-A	'49	45	.0015-.0035	45	.0015-.0035	.016C	.016C	.020	.020	15B	10A
Champion 9G	'50	45	111/32	45	5/16	.016C	.016C	.020	—	15B	10A
Commander 17A	'50	45	115/32	45	11/32	.016	.016	.020	.020	15B	10A

N.B. Fleetleaders (1941-2-6-7-8) are 20 and 22 Series; Torpedo 6 & 8 (1941-2-6-7-8) are 25 and 27 Series respectively. Streamliner 6 & 8 (1941-2-6-7-8) are 26 and 28 Series respectively; Streamliner 6 & 8 (1948) not distributed in Canada.

For key to abbreviations see page 113

VALVES AND VALVE TIMING

Make and Model	Year	Angle of Seat—Intake	Stem to Guide Clearance Intake (After 1949)	Size of Valve Head	Angle of Seat—Exhaust	Stem to Guide Clearance Exhaust (After 1949)	Size of Valve Stem	Tappet Clearance—Intake (Min.-Max.)	Tappet Clearance—Exhaust (Min.-Max)	Clearance for Valve Timing Intake	Clearance for Valve Timing Exhaust	Valve Timing—Intake Opens (Degrees)	Valve Timing—Exhaust Closes (Degrees)
SUNBEAM TALBOT (English)													
90	'49	—	—		—	—		.007	.009	.007	.009	13B	9A
90	'50	45	—		45	—		.007	.009	.007	.009	13B	9A
TRIUMPH (English)													
Series TRD (1800)	47-48	—	—		—	—		.012	.015	—	—	—	—
Series TRA	'49	—	—		—	—		.010	.012	—	—	—	—
VANGUARD (English)													
Sedan & Est. car	'49	45	—		45	—		.010	.012	.014	.014	10B	10A
Sedan & Est Car	'50	45	—		45	—		.010	.012	.014	.014	10B	10A

For key to abbreviations see page 113

VALVES AND VALVE TIMING

Make and Model	Year	Angle of Seat—Intake	Stem to Guide Clearance Intake (After 1949) Size of Valve Head	Angle of Seat—Exhaust	Stem to Guide Clearance Exhaust (After 1949) Size of Valve Stem	Tappet Clearance—Intake (Min.-Max.)	Tappet Clearance—Exhaust (Min.-Max.)	Clearance for Valve Timing Intake	Clearance for Valve Timing Exhaust	Valve Timing—Intake Opens (Degrees)	Valve Timing—Exhaust Closes (Degrees)
VAUXHALL LIP (English)											
Velox	'49	30	.001-. 017	45	.002-.0035	.006H	.013H	—	—	—	—
Velox	'50	30	—	45	—	.006H	.013H	—	—	—	—
WILLYS											
Willys Americar	'41	45	.0015	45	.0020	.014C	.016C	.020	—	9B	12A
Willys Americar	'42	45	.0015	45	.0020	.014C	.014C	.020	—	9B	12A
CJ-2A Uni. Jeep	'45	45	.0020	45	—	.0140	.0140	—	—	9B	12A
CJ-2A Uni. Jeep	'47	45	.002	45	.003	.014C	.014C	.020	.020	9B	12A
CJ2A,2WD,4WD,463	'48	45	.0015-.00325	45	.0025-.0045	.014	.014	.020	.020	9B	12A
6-63	'48	45	.0015-.00325	45	.0025-.0045	.014	.014	.020	.020	5B	12A
All Four Cyl. Models	'49	45	.0015-.00325	45	.0025-.0045	.016	.016	.020	W	9B	12A
6-63	'49	45	.0015-.00325	45	.0025-.0045	.016	.016	.020	W	5B	12A
4-73 Sta. Wgn.	'50	45	—	45	.0025-.0045	.018C	.016C	.026	NU	9B	12A
4 x 4-63 Sta. Wgn.	'50	45	—	45	.0025-.0045	.016C	.016C				
6-73 Sta. Wgn.	'50	45	—	45	.0025-.0045	.016C	.016C	.020	NU	5B	12A
4-73 VJ Jeepster	'50	45	—	45	.0025-.0045	.018C	.016C	.016	NU	9B	12A
6-73 VJ Jeepster	'50	45	—	45	.0025-.0045	.016C	.016C	.020	NU	5B	12A
WOLSELEY (English)											
Four-Fifty	'49	45	—	45	—	.015H	.015H	—	—	8B	8A
Six-Eighty	'49	45	—	45	—	.015H	.015H	—	—	8B	8A
Six Fighty	'48-'50	45	1.31I-1.23E	45	.50	.015H	.015H	Wo	—	8B	8A
Four Fifty	'48-'50	45	1.31I-1.23E	45	.50	.015H	.015H	Wo	—	8B	8A

ABBREVIATIONS

a—Remove all valve lash. Use No. 1 exhaust to check Valve timing. Check with dial indicator.
@—At operating temperature.
A—After top dead centre.
b—In block.
B—Before top dead centre.
C—Cold.
E—Exhaust.
f—Plus or minus .010.
F—Free (taper guide).
h—In head.
H—Hot.
I—Intake.
m—Millimeters.
NU—Not used.
r—Plus .005,-.000".
(r)—Plus .0007-.0012.
R—Valve face angle 44°.
TC—.010 up to engine No. 10769. .014 after
TDC—Top dead centre.
W—Use intake.
WO—Timing by timing marks.

CARBURETOR SERVICE

GASOLINE ECONOMY is *not* a function of the carburetor alone. The carburetor is only one link in the chain of units which must be "tuned" so that they all work in perfect harmony as a complete machine. The complete tune-up cycle of operations should be followed through in the proper order: compression, ignition, carburetion, then safety and general items.

Carburetor service simply means returning the unit to the original standards of adjustment established by the manufacturer. Special tools, gauges and service manuals must be available for this work. When wear necessitates the replacement of parts, check the carburetor model in the relevant manufacturer's manual and order by part number. This precaution is particularly important with regard to jets and metering rods in order to ensure that the original calibration will be restored when final adjustments are completed.

Some of the usual causes of poor gasoline mileage which should receive attention during the tune-up operation are:

Engine: Poor compression, usually due to worn and leaky piston rings, leaking valves, defective cylinder head gasket, valves not adjusted to standard specifications, valves sticking, broken or weak valve springs, incorrect valve timing, high engine friction, muffler clogged, or engine operating too hot or too cold.

Ignition: Timing not set to specifications, defective condenser, coil or distributor cap, contact breaker points worn or out of adjustment, high tension cables leaking, loose connections, spark plugs worn out, wrong type or not spaced according to specifications.

Carburetor: Float level incorrect, jets not correct size, worn or damaged, metering rod not correct size, worn, bent or not adjusted to specifications with the correct gauge, choke (automatic or manual) not operating properly, economizer system leaking fuel or not correctly adjusted, fuel air ratio too rich or too lean, clogged air cleaner, intake manifold too hot or too cold, leaks in fuel system.

General: Dragging brakes; tires under-inflated; high running gear friction; improper driving habits; operating conditions (stop and start).

CARBURETORS — CARTER

Manufacturer recommends: Do not try to check jets for wear by using drills or other gauges. It may ruin jets.

Make and Model	Year	Carburetor Type and Number	Idle Adjust. Mixture Screw—Turns Open	Float Level—Inches	Metering Jet Standard	Metering Rod Standard
BUICK						
Special 44	'41	WCD - 487S	1/2-1 1/2	Er 9/64-La 3/16	—	75-459
Super 45	'41	WCD - 528S(j)	1/4-1 1/4	3/16	—	75-492
Century 46	'41	WCD - 533S(y)	1/4-1 1/4	3/16	—	75-473
Roadmaster 47	'41	WCD - 533S(y)	1/4-1 1/4	3/16	—	75-473
Series 44	'42	WCD - 487S	1/2-1 1/2	Er 9/64-La 3/16	—	75-459
Series 46	'42	WCD - 533S(y)	1/4-1 1/4	3/16	—	75-473
Series 50	'46	WCD - 608S	1/2-1	3/16	—	75-459
Series 70	'46	WCD - 609S	3/4-1 3/4	3/16	—	75-592
Series 40	'47	WCD - 608S	*	3/16	—	75-459
Series 50	'47	WCD - 608S	*	3/16	—	75-459
Series 70	'47	WCD - 609S	*	3/16	—	75-592
Series 40-50	'47	WCD - 608S-608SA	1/2-1	3/16	—	75-459
Series 60-70	'47	WCD - 609S-609SA	3/4-1 3/4	3/16	—	75-592
Series 40, 50, 70	'48	(Not distributed in Canada)				
Series 40, 50, 60, 70	'49	(Not distributed in Canada)				
Series 40, 50, 60, 70	'50	(Not distributed in Canada)				
CADILLAC						
All Series	'41	WDO - 506S	1/2-1 1/2	1/8	—	75-422
All Series	'42	WCD - 486S	3/4-1 3/4	9/64	—	75-526
All Series	'46	WCD - 595S	1/2-1 1/2	9/64	—	75-576
All Series	'47	WCD - 595S	1/2-1 1/2	9/64	—	75-576
V-8	'48	(Not distributed in Canada)				
All	'49	(Not distributed in Canada)				
V-8	'50	(Not distributed in Canada)				
CHEVROLET						
Six	'41-'42	W-1 - 420S	1-2	1/2	—	75-377
Fl. Economy	'42	W-1 - 492S	1 1/4-2 1/4	1/2	—	75-508
Def. Vehicle	'42	W-1 - 515S	1 1/4-2 1/4	5/8	—	75-562
COE Truck	'41-'42-'46	BB-U - 517S	1/2-1 1/2	1/16	159-98	
Def. Vehicle	'40-'41-'42-'43	W-1 - 518S	1-2	5/8	—	75-571
Six	'46	W-1 - 574S	1 1/4-2 1/4	1/2	—	75-508
Six	'47	W-1 - 574S	1 1/4-2 1/4	1/2	—	75-485
Six	'48	W-1 - 574S	1 1/4-2 1/4	1/2	—	75-485
Six	'49	W-1 - 684S	1-2	1/2	—	75-485
CHRYSLER						
Royal 6 C-28	'41	BB-D - E6S3	1/2-1 1/2	5/64	159-89S	
Royal 6 C-28 FS	'41	BB-D - E6U1-2	1/2-1 1/2	5/64	159-89S	
Lt. Royal and Windsor 6-C-28FS	'41	BB-D - E6T1-2	1/2-1 1/2	5/64	159-89S	
Lt. Royal and Windsor 6 C-28	'41	BB-D - E6W1	1/2-1 1/2	5/64	150-89S	
Lt. Royal and Windsor 6-C-28F	'41	BB-D - EA1	1/2-1 1/2	1/16	159-89S	
Royal 6 C-34	'42	BB-D - EE1	1/2-1 1/2	5/64	159-89S	
Royal 6C-34F	'42	BB-D - EF1	1/2-1 1/2	1/16	159-89S	
Windsor 6 C-34FS	'42	BB-D - EG1	1/2-1 1/2	1/16	159-89S	
Windsor and Royal C-38FS	'46	BB-D - EV1	3/4-1 1/4	5/64	159-89S	
Windsor and Royal C-38F	'46	BB-D - EU1	3/4-1 1/4	5/64	159-89S	
Six—C-38S	'47	BB-D - EU1	3/4-1 1/4	5/64	159-89S	
Six—C-38W	'47	BB-D - EV1	3/4-1 1/4	5/64	159-89S	
Eight—C-39, C-40	'47	BB-D - E7A1	3/4-1 1/4	5/64	159-89S	
Six—C-38	'48	BB-D - EV1	3/4-1 1/4	1/16	159-89S	
Six—C-38	'48	BB-D - EU1	3/4-1 1/4I	5/64	159-89S	

For key to abbreviations see page 124

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CARBURETORS—CARTER

Manufacturer recommends; Do not try to check jets for wear by using drills or other gauges. It may ruin jets

Make and Model	Year	Carburetor Type and Number	Idle Adjust. Mixture Screw—Turns Open	Float Level—Inches	Metering Jet Standard	Metering Rod Standard
CHRYSLER—(Continued)						
Six—C-38	'48	BB-D - EX1	3/4-1 1/4	5/64	159-89S	—
C-46	'49	BB-D - E7J1-2-3	1/2-1 1/2	5/64	224-10S	—
C-45	'49	BB-D - E7L1-2-3	1/2-1 1/2	5/64	224-13S	—
C-48	'50	BB-D - E7L4	1/2-1 1/2	5/64	224-13S	—
C-48	'50	BB-D - EX3	3/4-1 1/4	5/64	224-13S	—
C-48	'50	BB-D - EU2	3/4-1 1/4	5/64	224-13S	—
C-49, C-50	'50	BB-D - E7J4	1/2-1 1/2	5/64	224-10S	—
DE SOTO						
Late 6 S-8	'41	BB-D - E6S3	1/2-1 1/2	5/64	159-89S	—
6 S-8FS	'41	BB-D - E6U1-2	1/2-1 1/2	5/64	159-89S	—
S10	'42	BB-D - EE1	1/2-1 1/2	5/64	159-89S	—
S10F	'42	BB-D - EF1	1/2-1 1/2	1/16	159-89S	—
S-10 FS	'42	BB-D - EG1	1/2-1 1/2	1/16	159-89S	—
S-11	'46	BB-D - EV1	3/4-1 1/4	5/64	159-89S	—
S-11	'47	BB-D - EV1	3/4-1 1/4	5/64	159-89S	—
S 11	'48	BB-D - EV1	3/4-1 1/4	1/16	159-89S	—
S 13 City Traffic	'49	BB D - E7V1	1/2-1 1/2	5/64	159-89S	—
S-13 Custom	'49	BB-D - E7L1-2-3	1/2-1 1/2	5/64	224-13S	—
S-14	'50	BB-D - E7L4	1/2-1 1/2	5/64	224-13S	—
S-14	'50	BB-D - EX3	3/4-1 1/4	5/64	224-13S	—
S-14	'50	BB-D - EU2	3/4-1 1/4	5/64	224-13S	—
S-14 City Traffic	'50	BB-D - E7W1	1/2-1 1/2	5/64	224-13S	—
DODGE						
D-19X, D20, D20X	'41	BB-D - D6D1	1/2-1 1/4	5/64	159-61S	—
Coronet	'49	BB-D - D6M1	1/2-1 1/2	5/64	224-11S	—
D-29, D-30	'49	BB-D - D6P1	1/2-1 1/2	5/64	224-11S	—
D-35, D-36	'50	BB-D - D6L2	1/2-1 1/2	5/64	224-12S	—
FRAZER						
F-47	'47	WA-1 - 622SA	3/4-1 3/4	1/2	—	75-593
Manhattan	'48	WCD - 685SA	1-1 1/2	1/16	—	75-622
F-496, F-495	'49	WCD - 723S	1-1 1/2	Flush to 1/32	—	75-669
F-486, F-496	'49	WCD - 685SA	1-1 1/2	1/16	—	75-622
F-505, F-506	'50	WCD - 723S	1-1 1/2	Flush to 1/32	—	75-669
HUDSON						
6-40, 6-10, 6-20	'41-'42	WA-1 - 454S	3/4-1 1/2	3/8	—	75-407
11, 12, 13	'41	WDO - 501S	1/2-1 1/2	1/8	—	75-467
14, 15, 17	'41	WDO - 502S	1/2-1 1/2	1/8	—	75-529
21, 22, 51	'42	WDO - 501S	1/2-1 1/2	1/8	—	75-467
24, 25, 27	'42	WDO - 502S	1/2-1 1/2	1/8	—	75-529
52, 53	'46	WDO - 501S	1/2-1 1/2	1/8	—	75-467
53, 54	'46	WDO - 502S	1/2-1 1/2	1/8	—	75-529
173-174	'47	WDO - 502S	1/2-1 1/2	1/8	—	75-466

For key to abbreviations see page 124

CARBURETORS—CARTER

Manufacturer recommends; Do not try to check jets for wear by using drills or other gauges. It may ruin jets.

Make and Model	Year	Carburetor Type and Number	Idle Adjust. Mixture Screw—Turns Open	Float Level—Inches	Metering Jet Standard	Metering Rod Standard
HUDSON—(Continued)						
Six	'48	WDO - 647S	1¼-1¾	3/16		75-610
Eight	'48	WDO - 648S	1-1½	13/64		75-607
Eix	'49	WDO - 647S	1¼-1¾	3/16		75-610
Eight	'49	WDO - 648S	1-1½	13/64		75-607
500	'50	WA 1 - 749S	½-1½	½		75-704
Six	'50	WGD - 776S	½-1½	3/16		75-732
Eight	'50	WGD - 773S	½-1½	3/16		75-724
KAISER						
K-100	'47	WA 1 - 6225A	¾-1¾	½		75-593
Special	'48	WA1 - 622SB	¾-1¾	½		75-642
K-492	'49	WCD - 723S	1-1½	Flush to 1/32		75-669
K-492	'49	WCD - 685SA	1-1½	1/16		75-622
Kaiser "STD"	'49	WA-1 - 622S	¾-1¾	½		75-593
K-502	'50	WCD - 723S	1-1½	Flush to 1/32		75-669
NASH						
3920-4020-4160	'41	WA-1 - 435S	¾-1½	3/8		75-372
4140-4240	'41-'42	BB-D - 513S	½-1¼	5/64		159-95S
4180	'41	WDO - 511S	½-1½	3/16		75-500
4260-4660	'42 '46	WA-1 - 464S	½-1½	3/8		75-534
4280	'42	WDO - 538S	¼-1¼	1/16		75-500
4640	'46	WA-1 - 611S	1¼-2¼	½		75-584
4740	'47	WA-1 - 611S	1¼	½		75-584
4760	'47	WA-1 - 644S	1¼	3/8		—
4840	'48	WA-1 - 662SA	¾-1¾	½		75-619
4860	'48	WA-1 - 464S	½-1½	3/8		75-372
4960	'49	WA-1 - 683S	½-1½	½		75-650
4940	'49	WA-1 - 694S	¾-1¾	½		75-640
5040	'50	WA-1 - 780S	¾-1¾	½		75-646
5060	'50	WA-1 - 746S	½-1½	½		75-650
OLDSMOBILE						
Six	'41-'42 '46	WA-1 - 504S	½-1½	½		75-487
Six HT	'41-'42 '46	WA-1 - 481S	½-1½	½		75-487
Eight SM	'41 '42 '46	WDO - 503S	½-1½	3/16		75-486
Eight HT	'41-'42 '46	WDO - 480S	½-1½	3/16		75-486
Six	'42	W-1 - 523S	½-1½	9/16		75-523
Six	'47	WA-1 - 504S	½-1½	½		75-487
Six HT	'47	WA-1 - 481S	½-1½	½		75-487
Eight SM	'47	WDO - 503S	½-1½	3/16		75-486
Eight HT	'47	WDO - 480S	½-1½	3/16		75-486
Six	'48	WA-1 - 651S	½-1½	½		75-487
Eight	'48	WDO - 650S	½-1½	3/16		75-641
88-98	'49	WGD - 714S	½-1	¼		75-682
76 (Hydr.)	'49	WA-1 - 709S	½-2	½		75-651
76 (Std.)	'49	WA-1 - 710S	½-2	½		75-651

(*Continued on page 118*)

For key to abbreviations see page 124

CARBURETORS — CARTER

Manufacturer recommends: Do not try to check jets for wear by using drills or other gauges. It may ruin jets.

Make and Model	Year	Carburetor Type and Number	Idle Adjust. Mixture Screw—Turns Open	Float Level—Inches	Metering Jet Standard	Metering Rod Standard
OLDSMOBILE—(Continued)						
76 (Hydr.)	'50	WA-1 - 763SA	1/2-1 1/2	1/2	—	75-651
76 (Std.)	'50	WA-1 - 764S	1/2-1 1/2	1/2	—	75-651
PACKARD						
120	'41	WDO - 478S	1/2-1 1/2	5/32	—	75-541
1951-120	'41-'42-'46	WDO - 512S	1/2-1 1/2	5/32	—	75-541
2000	'41	WA-1 - 530S	1/2-1 1/2	3/8	—	75-535
160-8180	'42-'46	WDO - 531S	1-2	5/32	—	75-538
2100-2130	'47	WA-1 - 530S	1/2-1 1/2	3/8	—	75-535
2101-2111	'47	WDO - 512S	1/2-1 1/2	5/32	—	75-451
2106-2013-2126	'47	WDO - 531S	1/2-1 1/2	5/32	—	75-538
Super 8	'48	WDO - 643SA	3/4-1 1/4	5/32	—	75-451
Standard 8	'48	WDO - 644SA	5/8-1 1/8	5/32	—	75-638
Custom 8	'48	WDO - 531SA	1 1/2-2	5/32	—	75-616
Std. 8	'49	WDO - 644SA	5/8-1 1/8	5/32	—	75-638
Super 8	'49	WDO - 643SA	3/4-1 1/4	5/32	—	75-606
Custom 8	'49	WDO - 531SA	1 1/2-2	5/32	—	75-616
Taxi	'49	WA-1 - 530S	1/2-1 1/2	3/8	—	75-535
2362-2365-2392-2395	'50	WGD - 728SA	1-1 1/2	13/64	—	75-707
PLYMOUTH						
P-11 P-12	'41	BB-D - D6A1-2(i)	1/2-1 1/4	5/64	159-61S	—
P-14 P-15	'42-'46	BB-D - D6G1(i)	1/2-1 1/4	5/64	159-61S	—
P 15	'47	BB-D - D6G1(i)	1/2-1 1/4	5/64	159-61S	—
P-15	'48	BB-D - D6G1	1/2-1 1/4	5/64	159-61	—
P-17, P-18	'49	BB-D - D6L1	1/2-1 1/2	5/64	224-12S	—
P-19, P-20	'50	BB-D - D6L2	1/2-1 1/2	5/64	224-12S	—
PONTIAC						
2000, 2200, 2500	'41 Early '42	WA-1 - 494S	3/4-1 3/4	1/2	—	75-472
2000, 2200, 2500	'42	W-1 - 521S	1/2-1 1/2	11/16	—	75-530
2000, 2200, 2500	'42	W-1 - 545S	1/2-1 1/2	11/16	—	75-552
20-22-25	'46	WA-1 - 537S	1/2-1 3/4	7/16	—	75-528
42-27, 42-28	'46	WDO - 548S	1/4-1 1/4	5/16	—	75-443
47-27, 47-28	'47	WCD - 630S	3/4-1 3/4	3/16	—	75-594
Six	'47	WA-1 - 537S	—	7/16	—	75-528
Eight	'47	WCD - 630S	—	3/16	—	75-594
Wix Std. Trns.	'48	WA1 - 537S	1-1 3/4	7/16	—	75-528
Six—Hydr. Trns.	'48	WA1 - 652S	1-1 3/4	7/16	—	75-528
Eight—Std. Trns.	'48	WCD - 630SB	3/4-1 3/4	3/16	—	75-594
Eight—Hydr. Trns.	'48	WCD - 653S	3/4-1 3/4	3/16	—	75-594
49-27 (std.)	'49	WCD - 719S	3/4-1 1/4	3/16	—	75-664
49-27 (hdr.)	'49	WCD - 720S	3/4-1 1/4	3/16	—	75-664
49-25 (std.)	'49	WA-1 - 717S	1-1 3/4	7/16	—	75-528
59-25 (hdr.)	'49	WA-1 - 718S	1-1 3/4	7/16	—	75-528
50-25 (Std.)	'50	WA-1 - 717S	1-1 3/4	7/16	—	75-528
50-25 (Hydr.)	'50	WA-1 - 718S	1-1 3/4	7/16	—	75-528

For key to abbreviations see page 124

CARBURETORS — CARTER

Manufacturer recommends: Do not try to check jets for wear by using drills or other gauges. It may ruin jets.

Make and Model	Year	Carburetor Type and Number	Idle Adjust. Mixture Screw—Turns Open	Float Level—Inches	Metering Jet Standard	Metering Rod Standard
PONTIAC—(Continued)						
50-27 (Std.)	'50	WCD - 719SA	3/4-1 3/4	3/16		75-664
50-27 (Hydr.)	'50	WCD - 720SA	3/4-1 1/4	3/16		75-664
N.B. Fleetleaders (1941-2-6-7-8) are 20 and 22 Series; Torpedo 6 & 8 (1941-2-6-7-8) are 25 and 27 Series respectively. Streamliner 6 & 8 (1941-2-6-7-8) are 26 and 28 Series respectively; Streamliner 6 & 8 (1948) not distributed in Canada.						
STUDEBAKER						
M-16	'41-'42-'45-'46	BB-D - 514S	1/2-1	5/64	159-58S	
Champion 3G	'41	WA-1 - 496S	1/2-1 1/2	5/16		75-484
Champion 4G and T	'42	WA-1 - 496S	1/2-1 1/2	5/16		75-584
Skyway 5G	'46	WA-1 - 496S	1/2-1 1/2	5/16		75-484
Champion 5G and T	'46	WE - 532S	1/2-1 1/2	1/4		75-484
Champion 6G	'47	WE - 532S	1/2-1 1/2	1/4		75-484
Champion 6G and T	'47	WE - 532S	1/2-1 1/2	1/4		75-484
Champion 7G	'48	WE - 661S	1/2-1 1/2	3/8		75-484
Champion 8G	'49	WE - 715S	1/2-1 1/2	3/8		75-652
Champion 9G	'50	WE - 715S	1/2-1 1/2	3/8		75-652
WILLYS						
Americar	'41-'42	W,O - 507S	1/2-1 1/2	3/8		75-497(r)
Jeep (TT)	'42	W-O - 539S	1-2	3/8		75-547
CJ-2A Universal Jeep	'45-'46	W-O - 596S	1-2	3/8		75-547
Station Wagon	'46	WA-1 - 613S	1/2-1 1/2	5/16		75-589
CJ-2A Universal Jeep	'47	W-O - 596S	1/2	3/8		75-547
Station Wagon	'47	WA-1 - 613S	1/4-1 1/2	5/16		75-589
Universal jeep, Jeep truck and sports	'48	WO - 636SA	1-2	3/8		75-547
Station wagon, pane delivery, sports phaeton	'48	WA1 - 613S	1/2-1 1/2	5/16		75-589
Station Sedan "6"	'48	WA1 - 645S	1-2	5/16		75-609
Station Wagon 6	'49	WA-1 - 645S	1-2	5/16		75-609
Universal Jeep, Jeep Trucks	'49	WO - 636SA	1-2	3/8		75-547
Stn. Wagon, Panel Delivery Jeepster	'49	WA-1 - 613S	1/2-1 1/2	5/16		75-589
4 wheel drive Jeep	'50	WO - 636SA	1-2	3/8		75-547
4-63 Stn. Wgn., Panel Del. & Jeepster	'50	YF - 738S	3/4-1 3/4	9/32		75-708

For key to abbreviations see page 124

CARBURETORS—FORD

Manufacturer recommends: Do not try to check jets for wear by using drills or other gauges. It may ruin jets.

Make and Model	Year	Carburetor Type and Number	Power By-Pass Jet —Size No.	Main Metering Jet	Fuel Level (Engine Idling)	Float Needle and Seat Assembly	Idle Adjust. Mixture Screw—Turns Open
FORD							
V-8 85	'41	F-94	—	.050	15/32	78-9564	5/8-3/4
V-8 85	'42	F-94	—	.050	15/32	78-9564	5/8-3/4
V-8	'49	8BA	.039	.051	1/2M1/32	.097	3/4
V-8	'50	C8BA-9510	.94	.051	1.35-1.32	7HA.9564	3/4out
LINCOLN							
Lincoln	'41	O-1	—	.054	19/32	—	5/8-7/8
METEOR							
Meteor	'49	8BA	.039	.051	1/2M1/32	.097	3/4
Meteor	'50	c8BA-9510	.94	.051	1.35-1.32	7HA.9564	3/4out
MERCURY							
Mercury	'41	F-94	—	1050	15/32	78-9564	5/8-3/4
Mercury	'42	F-94	—	.050	15/32	78-9564	5/8-3/4
Mercury	'49	8CM	65	.048	1/2M1/32	.097	3/4
Mercury	'50	8CM-9510	11/32	.049	1/2M1/32	8CM-9564	5/8-3/4
MONARCH							
V-8	'49	8CM	65	.048	1/2M1/32	.097	3/4
V-8	'50	8CM-9510	11/32	.049	1/2M1/32	8CM-9564	5/8-3/4

CARBURETORS—HOLLEY

FORD							
De Luxe	'46	F-94	—	.051	11/16	78-9564	5/8-3/4
Super De Luxe	'46	F-94	—	.051	11/16	78-9564	5/8-3/4
De Luxe	'47	F-94	.039	.051	11/16	78-9564	5/8-3/4
Super De Luxe	'47	F-94	.039	.051	11/16	78-9564	5/8-3/4
Super De Luxe	'48	F-94	.039	.051	11/16	78-9564	5/8-3/4
LINCOLN							
Linc. & Lincoln Continental	'47	F-100	.041	.053	19/32	78-9564	—
Linc. & Lincoln Continental	'48	F-100	.041	.053	19/32	78-9564	—
Linc. & Lincoln Continental	'49	(Not distributed in Canada)					
MERCURY							
114 & 114X	'46	F-94	—	.051	11/16	78-9564	5/8-3/4
118	'46	F-94	—	.051	11/16	78-9564	5/8-3/4
114 & 114X	'47	F-94	.039	.051	11/16	78-9564	5/8-3/4
118	'47	F-94	.039	.051	11/16	78-9564	5/8-3/4
118	'48	F-94	.039	.051	11/16	78-9564	5/8-3/4
MONARCH							
Monarch	'46	F-94	—	.051	11/16	78-9564	5/8-3/4
Monarch	'47	F-94	.039	.051	11/16	78-9564	5/8-3/4
Monarch	'48	F-94	.039	.051	11/16	78-9564	5/8-3/4

For key to abbreviations see page 124

CARBURETORS—ROCHESTER

Make and Model	Year	Carburetor Type and Number	Power By-Pass Jet —Size No.	Main Metering Jet Standard	Fuel Level (Engine Idling)	Float Needle and Seat Assembly	Idle Adjust. Mixture Screw—Turns Open
CHEVROLET							
Six	'50	7002050B	.038	.051	1¾R	.076	1½-2½
OLDSMOBILE							
Eight	'50	7002570AA	1-1	.054	23/32O	1-1	1¼-2¼

CARBURETORS—SOLEX

HILLMAN MINX (English)							
Mark IV	'50	30FA1	200	139cc	(F)	.06	A
ROVER (English)							
5	'49	30PAA1	265	97.5	—	—	¾-1
STANDARD VANGUARD (English)							
Saloon	'49	32B1	—	135	—	—	—
Saloon	'50	32B1	—	135	—	—	—
SUNBEAM TALBOT (English)							
90	'50	DBA-36	.030	.050	.66-.72	.100	—

CARBURETORS—STROMBERG

BUICK							
Special 44	'41	AAV-16	60	.045	19/32	P-22499	1¼
Super 45	'41	AA1†	No	.048	19/32	P-22499	1¾
Super 45	'41	AAV-16‡	60	.041	19/32	P-22498	1¼
Century 46	'41	AA-1†	No	.053	19/32	P-22498	1¼
Century 46	'41	AAV-16‡	56	.047	13/32	P-22498	1¼
Roadmaster 47	'41	AA-1†	No	.053	19/32	P-22498	1¼
Roadmaster 47	'41	AAV-16‡	56	.047	13/32	P-22498	1¼
Series 44	'42	AAV-16	60	.045	13/32	P-22499	1¼*
Series 45	'42	AA-1†	No	.048	13/32	383046	1¼*
Series 45	'42	AAV-16‡	60	.041	19/32	P-22498	1¼*
Series 46	'42	AA-1†	No	.053	19/32	383046	1¼*
Series 46	'42	AAV-16‡	56	.047	19/32	P-22498	1¼*
Series 50	'46	AAV-16	—	—	19/32	P-22498	*
Series 70	'46	AAV-26	—	—	21/32	—	*

(*Continued on page 121*)

For key to abbreviations see page 124

CARBURETORS—STROMBERG

Manufacturer recommends: Do not try to check jets for wear by using drills or other gauges. It may ruin jets.

Make and Model	Year	Carburetor Type and Number	Power By-Pass Jet —Size No.	Main Metering Jet	Fuel Level (Engine Idling)	Float Needle and Seat Assembly	Idle Adjust. Mixture Screw—Turns Open
BUICK—(Continued)							
Series 40	'47	AAV-16	60	.045	x	P-22498	*
Series 50	'47	AAV-16	60	.045	x	P-22498	*
Series 70	'47	AAV-26	54	.051	x	P-22499	*
Series 40, 50, 70	'48	(Not distributed in Canada)					
Series 40, 50, 70	'49	(Not distributed in Canada)					
Series 40, 50, 70	'50	(Not distributed in Canada)					
CADILLAC							
All Models	'41	AAV-26	53	.050	5/8	P-22499	1 1/2
All Models	'42	AAV-26	53	.048	5/8	P-22499	1 1/2*
"V" Eight	'47	AAV-26	—	—	5/8	—	—
V-8	'48	(Not distributed in Canada)					
V-8	'49	(Not distributed in Canada)					
V-8	'50	(Not distributed in Canada)					
CHRYSLER							
Cew Yorker 8, C-30	'41	AAV-2	c	.051	5/8	P-22499	1
Nrown Imperial 8, C-33	'41	AAV-2	c	.051	5/8	P-22499	1
New Yorker 8, C-36	'42	AAV-2	c	.051	5/8	P-22499	1*
Crown Imperial 8, C-37	'42	AAV-2	c	.051	5/8	P-22499	1*
Eight—C-39, C-40	'47	AAGS-2	c	.051	@	P-22499	1*
Eight—C-39, C-40	'48	AAGS-2	c	.051	@	P-22499	1*
DODGE							
Kingsway D-20	'41	BXV-3	54	.058	5/8	a	1
De Luxe & Special D-21	'41	BXV-3	54	.058	5/8	a	1
Luxury Liner D-19	'41	BXVD-3	58	.057	5/8	b	1
De Luxe D-23	'42	BXV-3	55	.061	5/8	a	1*
Custom D-22	'42	BXVD-3	55	.061	5/8	b	1*
D-25	'46	3-67A	55	.061	5/8	.098	1
D-24	'46	3-77	55	.061	5/8	.098	1
D-25	'47	BXV-3	55	.061	5/8	P-21918	A
D-24	'47	BXVD-3	55	.061	5/8	P-21918	A
D-25	'48	BXV-3	55	.061	5/8	P-21918	A
D-24	'48	BXVD-3	55	.061	5/8	P-21918	A
D-30	'49	BXVD-3	55	.061	5/8	P-21918	1
D34	'50	BXVD-3	P-24062	.061	5/8	P-21918	1
HUMBER HAWK (English)							
Hawk (Mk. III)	'49	DBA-36	.030	.045	.66-.72	.100	—
Hawk (Mk. III)	'50	DBA-36	.030	1045	.66-.72	.100	—
Super Snipe (Mk. II)	'48	DBVA-42	.054	.065	.66-.72	.113	—
Super Snipe (Mk. II)	'49	DBVA-42	.054	.065	.66-.72	.113	—
Super Snipe (Mk. II)	'50	DBVA-42	.054	.065	.66-.72	.113	—
Pullman (Mk. II)	'49	DBVA-42	.054	.065	.66-.72	.113	—
Pullman (Mk. II)	'50	DBVA-42	.054	.065	.66-.72	.113	—

For key to abbreviations see page 124

CARBURETORS—STROMBERG

Manufacturer recommends: Do not try to check jets for wear by using drills or other gauges. It may ruin jets.

Make and Model	Year	Carburetor Type and Number	Power By-Pass Jet —Size No.	Main Metering Jet	Fuel Level (Engine Idling)	Float Needle and Seat Assembly	Idle Adjust. Mixture Screw—Turns Open
PACKARD							
Six 110	'41	BXOV-25	53	.060	5/8"	P-21918	1 1/8
Super 8	'41	AAV-26	54	.050	5/8"	P-22499	1 1/8
Six 110	'42	BXOV-26	53	.060	5/8"	P-21918	1 1/8
Super 8	'42	AAV-26	54	.050	5/8"	P-22499	1 1/8
STUDEBAKER							
Comm 6 (11A)	'41	BXOV-25	54	.057	5/8"	P-24063	1 1/4
Pres. 8 (7C)	'41	AAV-26	56	.044	5/8"	P-22499	1 1/4
Comm. 6 (12A)	'42	BXOV-25	54	.057	5/8"	P-24063	1 1/4*
Pres. 8 (8C)	'42	AAV-26	56	.044	5/8"	P-22499	1 1/4*

CARBURETORS—S.U.

M.G. (English)							
Series TD	'50	S.U.	—	O.S.	1/8	—	—
Series Y	'50	SU H.2.	—	—	1/8	—	—
MORRIS (English)							
Minor	'48	SU	—	M	1/8 n	—	—
Oxford	'48	SU	None	M	1/8 m	—	A
Six	'49	SU	—	AYM	1/8 m	—	—
Minor	'49	SU	—	M	1/8 m	—	—
Oxford	'49	SU	None	M	1/8 m	—	A
Six	'50	SU	—	AYM	1/8 m	—	—
Minor	'50	SU	—	M	1/8 m	—	—
Oxford	'50	SU	None	M	1/8 m	—	A
RILEY (English)							
1 1/2 Litre	'46-'50	SU	—	No. 3	—	—	—
2 1/2 Litre	'47-'50	SU	—	EE	—	—	—
WOLSELEY (English)							
Four-Fifty	'48-'50	SU	—	EM	1/8(b)	—	—
Six-Eighty	'48-'50	SU	—	HB	1/8(b)	—	—

CARBURETORS—TILLOTTSON

CROSLEY							
CC (up to 41547)	'47	DY-9C	N	(a)	F	—	3/4-1 1/4
CC, CD (Up to 106039)	'48	DY-9C	N	(a)	F	—	3/4-1 1/4
CD (After 106039)	'49	DY-9C	N	(a)	F	—	3/4-1 1/4
Crosley	'50	DY-9C	(c)	56D	23/32G	—	g

For key to abbreviations see page 124

CARBURETORS—ZENITH (English)

Manufacturer recommends: Do not try to check jets for wear by using drills or other gauges. It may ruin jets.

Make and Model	Year	Carburetor Type and Number	Power By-Pass Jet—Size No.	Main Metering Jet	Fuel Level (Engine Idling)	Float Needle and Seat Assembly	Idle Adjust. Mixture Screw—Turns Open
ANGLIA (English)							
Four Cylinder	'49	CE	—	85	.669	.059	½-1½
Four Cylinder	'50	20E	75	85	.669	1.5	—
AUSTIN (English)							
A-40	'48	30vm4C/51105	—	95	—	—	1½
A-40 Devon & Dorset	'49	30VM5	—	95	65	50	—
Devon and Dorset	'50	30vm5	23	95	—	1.5mm	1
PREFECT (English)							
Four Cylinder	'49	CE	—	85	.669	.059	½-1½
Four Cylinder	'50	20E	75	85	.669	1.5	—

ABBREVIATIONS

a—P-24827 with filter.
(a)—Adjustable.
@—At hole.
A—Adjust to smooth idle-out richer.
b—P-24827 with filter: P-24063 without filter
c—Two—No. 56.
(c)—Lower hole No. 70 drill. Upper hole No. 60 drill.
C—Concentric.
D—Drill.
Er—Early.
F—At bottom of plug inside float chamber.
(F)—Fixed.
g—Turn clockwise until seated (without force) then turn back 1¼ turns.
G—From air horn body gasket.
(i)—Cars with automatic choke, equipped with carburetors D6C1, or D6C2.
La—Late.
m—Below top of jet.
M—Standard EK or FP Rich—MG. or ES. Weak—M.O.W.. or HB.
N—None.
O—Cover gasket removed, cover and float assy, held upside down, dimension from face of cover to top of soldered seam at front of float.
R—Float level—measured from cover gasket to bottom of float.
SV—Single venturi.
V—Vertical.
W-1—Downdraft, single.
WA-1—Downdraft, single, with climatic control.
WCD—Dual downdraft, climatic control.
WDO—Downdraft dual.
WE—Downdraft. single.
WO—Dual type.
W-O—Downdraft, single.
x—At bottom of sight hole.
(y)—Front carburetor 533S; rear 534S, or 544S.
*—Out richer; In leaner—adjust to smooth, one barre at a time.
†—Rear carburetor.
‡—Front carburetor.

TABLE OF DECIMAL EQUIVALENTS

1/64	.015625
1/32	.03125
3/64	.046875
1/16	.0625
5/64	.078125
3/32	.09375
7/64	.109375
1/8	.125
9/64	.140625
5/32	.15625
11/64	.171875
3/16	.1875
13/64	.203125
7/32	.21875
15/64	.234375
1/4	.25
17/64	.265625
9/32	.28125
19/64	.296875
5/16	.3125
21/64	.328125
11/32	.34375
23/64	.359375
3/8	.375
25/64	.390625
13/32	.40625
27/64	.421875
7/16	.4375
29/64	.453125
15/32	.46875
31/64	.484375
1/2	.5
33/64	.515625
17/32	.53125
35/64	.546875
9/16	.5625
37/64	.578125
19/32	.59375
39/64	.609375
5/8	.625
41/64	.640625
21/32	.65625
43/64	.671875
11/16	.6875
45/64	.703125
23/32	.71875
47/64	.734375
3/4	.75
49/64	.765625
25/32	.78125
51/64	.796875
13/16	.8125
53/64	.828125
27/32	.84375
55/64	.859375
7/8	.875
57/64	.890625
29/32	.90625
59/64	.921875
15/16	.9375
61/64	.953125
31/32	.96875
63/64	.984375
1	1.

WHEEL ALIGNMENT AND TIRES

Make and Model	Year	Caster—Degrees	Camber—Degrees	Toe-in—Inches	King Pin Inclination—Degrees	Tire Size	Pressure—Front	Pressure—Rear
ANGLIA (English)								
Four Cylinder	'49	8 20′a	2 16′(a)	1/16-1/8	7°6′(A)	5.00 x 16	24	24
Four Cylinder	'50	7 20′-8 20′	1 54′-2 16′	1/16-1/8	6°54′-7°6′	5.00 x 16	24	24
AUSTIN (English)								
A-40	'48	2	1	0 - 1/16	6 1/2	5.95 x 16	24	25
A-40 Devon & Dorset	'49	1 3/4	1	1/16-1/8	6 1/2	5.25 x 16	24	25
A-40 Devon and Dorset	'50	1 3/4	1	1/16-1/8	6 1/2	5.25 x 16	24	25
BUICK								
Sp. 44, Super 45	'41	3/8	0	—1/8-1 1/8	3 1/2	6.50 x 16	25	30
Series 46, 47	'41	3/8	0	—1/8-1 1/8	3 1/2	7.00 x 15	25	30
Series 49	'41	3/8	0	—3/8-+7/8	4 3/4	7.50 x 16	25	30
Series 44	'42	3/8	0	0-1/16	3 1/2	6.50 x 16	25	25
Series 46	'42	3/8	0	0-1/16	3 1/2	7.00 x 15	25	25
Series 50	'46	3/8 ± 3/8	— 1/8 to + 1 1/8	0-1/16	4 1/8	6.50 x 16	25-28W	25-28W
Series 70	'46	3/8 ± 3/8	— 1/8 to + 1 1/8	0-1/16	4 1/8	7.00 x 15	25-28W	25-28W
Series 40	'47	3/8±3/8	— 1/8 to+ 1/8	0-1/16	4 1/4**	6.50 x 16	25-28W	25-28W
Series 50	'47	3/8±3/8	— 1/8 to+ 1/8	0-1/16	4 1/4**	6.50 x 16	25-28W	25-28W
Series 70	'47	3/8±3/8	— 1/8 to+ 1/8	0-1/16	4 1/4**	7.00 x 15	25-28W	25-28W
Series 40, 50, 70	'48	(Not distributed in Canada)						
Series40, 50, 70	'49	(Not distributed in Canada)						
Series 40, 50 70	'50	(Not distributed in Canada)						
CADILLAC								
60, 61, 62, 63	'41	—1 3/4	—3/8	1/32	6	7.00 x 15	28	28
67, 75	'41	—1 3/4	—3/8	1/32	6	7.50 x 16	24	32
60, 61, 62, 63	'42	—1 3/4	—3/8	1/32	6	7.00 x 15	28	28
67, 75	'42	—1 3/4	—3/8	1/32	6	7.50 x 16	24	32
"V" Eight	'46	—1 3/4 to —2 3/4∅	—3/8 to +3/8	1/32-3/32	5 51′	K	28††	28††
Eight	'47	—1 3/4 to —2 3/4∅	—3/8 to +3/8	1/32-3/32	5 51′	K	28††	28††
V-8	'48	(Not distributed in Canada)						
V-8	'49	(Not distributed in Canada)						
V-8	'50	(Not distributed in Canada)						
CHEVROLET								
Six	'41	0	1/4	0	4 3/4	6.00 x 16	26	28
Six	'42	0	1/4	0	4 3/4	6.00 x 16	26	28
Six	'46	0 ± 1/2	—1/4 ± 1/2	0-1/16	4 3/4 ± 1/2	6.00 x 16	27-30	29-32
Six	'47	0±1/2	—1/4±1/2	0-1/8	4 3/4±1/2	6.00 x 16	26	28
Six	'48	0±1/2	—1/4±1/2	0-1/8	4 3/4± 1/2	6.70 x 15	24	24
Six	'49	30′±30′	30′±30′	0-1/8	4°±30′	6.70 x 15	24	24
Six	'50	30′±30′	30′±30′	0-1/8	4°±30′	6.70 x 15	24	24
CHRYSLER								
Royal 6 C-28	'41	0*	+1/4	0‡	4 3/4	6.25 x 16	28	28
N. York. 8 C-30	'41	0*	+1/4	0‡	4 3/4	7.00 x 15	28	28
Cr. Imp. C-33	'41	0*	+1/4	0‡	4 3/4	7.50 x 15	28	28
Royal 6 C-34	'42	0*	+1/4	0‡	4 3/4	6.25 x 16	28	28
N. York. 8 C-36	'42	0*	+1/4	0‡	4 3/4	7.00 x 15	28	28
Cr. Imp. C-37	'42	0*	+1/4	0‡	4 3/4	7.50 x 15	28	28
C-38W, C-38S	'46	0±1	+1/4	0	4 3/4-6	6.50 x 15	28	28
Six-C-38W, C-38S	'47	—1 to +1*	0 to +3/4P	0-1/16	4 3/4-6	6.50 x 15	28	28

(Continued on page 128)

For key to abbreviations see page 135

WHEEL ALIGNMENT AND TIRES

Make and Model	Year	Caster—Degrees	Camber—Degrees	Toe-in—Inches	King Pin Inclination—Degrees	Tire Size	Pressure—Front	Pressure—Rear
CHRYSLER—(Continued)								
Eight-C-39, C-40	'47	—1 to +1*	0 to +¾P	0-1 1/16	4¾-6	7.00 x 15A	28	28
Six-C-38W, C-38S	'48	—1 to —1*	0 to +¾P	0-5/16	4¾-6	7.60 x 15	24	24
Eight-C-39	'48	—1 to —1*	0 to +¾P	0-1/16	4¾-6	8.20 x 15	24	24
Eight-C-40	'48	—1 to —1*	0 to +¾P	0-1/16	4¾-6	8.90 x 15	24	24
Six C-45	'49	—1 to —30	0 to¾‡‡‡	0-1/16	4¾-6	7.60 x 15	24C	24C
Eight C-46, C-47	'49	—1 to —3	0 to ¾	0-1/16	4¾-6	8.20 x 15	24C	24C
Six	'50	—1 to —3(b)	0-¾	0-1/16	4¾-6	7.60 x 15B	24C	24C
Eight	'50	—1 to —3(b)	0-¾P	0-1/16	4¾-6	8.20 x 15	24C	24C
CROSLEY								
CC (Up to 41547)	'47	7½	2	1/16	6½	4.50 x 12	25	25
CC CD Up to 106039	'48	7½	2	1/16	6½	4.50 x 12	25	25
CD (After 106039)	'49	7½	2	1/16	6½	4.50 x 12	25	25
Crosley	'50	7½	2	3/64-1/16	7½	4.50 x 12	25	25
DE SOTO								
Six S-8	'41	0*	+¼	0‡	4¾	6.25 x 16	28	28
Sis S-10	'42	0*	+¼	0‡	4¾	6.25 x 16	28	28
S-11	'46	0 ± 1	+¼	0	4¾-6	6.50 x 15	28	28
S-11	'47	—1 to +1*	0 to +¾P	0-1/16	4¾-6	6.50 x 15	28	28
S-11	'48	—1 to +1*	0 to +¾P	0-1/16	4¾-6	7.60 x 15	24	24
S-13 Custom	'49	—1 to —3c	0-¾‡‡‡	0-1/16	4¾-6	7.60 x 15	24C	24C
S14	'50	—1 to —3(b)	0-¾P	0-1/16	4¾-6	7.60 x 15	24C	24C
DODGE								
Kingsway D-20	'41	½*	+¼	0‡	4¾	6.00 x 16	28	28
De Luxe D-21	'41	0*	+¼	0‡	4¾	6.00 x 16	28	28
Luxury Liner D-19	'41	0*	+¼	0‡	4¾	6.00 x 16	28	28
De Luxe D-23	'42	0*	+¼	0‡	4¾	6.00 x 16	28	28
Custom D-22	'42	0*	+¼	0‡	4¾	6.00 x 16	28	28
D-25	'46	0 ± 1	+¼	0	4¾-6	6.00 x 16	28	28
D-24	'46	0 ± 1	+¼	0	4¾-6	6.00 x 16 +	28	28
D-25	'47	—1 to +1*	0 to ¾P	0-1/16	4¾-6	6.00 x 16	28	28
D-24	'47	—1 to +1*	0 to ¾P	0-1/16	4¾-6	6.00 x 16 +	28	28
D-25	'48	—1 to +1*	0 to ¾P	0-1/16	4¾-6	6.70 x 15	24	24
D-24	'48	—1 to +1*	0 to ¾P	0-1/16	4¾-6	7.10 x 15 +	24	24
D-30	'49	—1 to +1	0-¾P	0-1/16	4¾-6	7.10 x 15(t)	24C	24C
D-31, D-32	'49	—1 to +1	0-¾P	0-1/16	4¾-6	6.40 x 15(T)	24C	24C
D34-D35-D36	'50	—1 to +1	0-¾P	0-1/16	4¾-6	7.10x15B(x)	24C	24C
FORD								
V-8 85	'41	8	1	1/16	8	6.00 x 16	28	28
V-8 85	'42	8	1	1/16	8	6.00 x 16	28	28
De Luxe	'46	7 15′	1	1/16	8	6.00 x 16	28	28
Super De Luxe	'46	7 15′	1	1/16	8	6.00 x 16	28	28
De L. & Super De L.	'47	5¼ to 7¼	¾ to 1¼	1/16-1/8	8	6.00 x 16	28	28
De L. & Super De L.	'48	5¼ to 7¼	¾ to 1¼	1/16-1/8	8	6.00 x 16	28	28
V-8	'49	0 to —¾	—¼ to +¾	1/16-1/8	5	6.70 x 15	24	24
V-8	'50	+0°30′ to —1	0-+1	1/16-1/8	5¼	6.70 x 15	24	21
FRAZER								
F-47	'47	—1 to +1	0 to ¾	1/16	5½-6	6.50 x 15	28	28
F-47-47C, 485-486	'48	—0 to 1‡‡	0 to +¾‡‡‡	1/16	4¾-5¾	6.50 x 15T	28	28

For key to abbreviations see page 135

WHEEL ALIGNMENT AND TIRES

Make and Model	Year	Caster—Degrees	Camber—Degrees	Toe-in—Inches	King Pin Inclination—Degrees	Tire Size	Pressure—Front	Pressure—Rear
FRAZER—(Continued)								
Series F-495, 496	'49	±1‡‡	0-¾‡‡‡	0-1/16‡‡	4¾-5¾k	7.10 x 15	24C	24C
Series F-495, 496	'50	±1‡‡	0-¾‡‡‡	0-1/16‡‡	4¾-5¾k	7.10 x 15	24C	24C
HILLMAN MINX (English)								
Mark III	'49	3 45′	¾P	⅛	8 15′	5.50 x 15	25	26
Mark IV	'50	3 45′	45H	⅛	8 15′	5.50 x 15	25	25
HUDSON								
Six-10T	41	0	½	1/32	3½	5.50 x 16	32	32
Six-10SP, 10P	'41	0	½	1/32	3½	6.00 x 16	26	30
Six-11, 18	'41	0	½	1/32	3½	6.00 x 16	26	30
Six-12	'41	0	½	1/32	3½	6.25 x 16	26	30
Eight-14	'41	0	½	1/32	3½	6.25 x 16	26	30
Eight-15, 17	'41	0	½	1/32	3°-6′	6.50 x 16	26	30
"6"-18, 20, 21	'42	0	½	1/32	3⅜	6.00 x 16	26	30
"6"-22	'42	0	½	1/32	3⅜	6.25 x 16	26	30
"8"-24	'42	0	½	1/32	3⅜	6.25 x 16	26	30
"8"-25, 27	42	0	½	1/32	3⅜	6.50 x 15	26	30
Six-51, 52	'46	0±¼	½ ¼	1/32±1/32	3 36′	X	Y	Z
Eight-53, 54	'46	0±¼	½ ¼	1/32 1/32	3 36′	X	Y	Z
Six—171, 172	'47	0±¼	½±¼	1/32 1/32	3 36′	X	Y	Z
Eight—173, 174	'47	0±¼	½¼	1/32±1/32	3 36′	X	Y	Z
Series 481, 482	'48	0± ¼	½± ¼	—	3 36′	7.10 x 15	24	24
Series 483, 484	'48	0± ¼	½± ¼	—	3 36′	7.10 x 15	24	24
Series 491, 492	'49	½-1½	½-1½	0- 1/16	3 36′	7.10 x 15	24	24
Series 493, 494	'49	½-1½	½-1½	0- 1/16	3 36′	7.10 x 15	24	24
Series 500-504	'50	½-1½	½-1½	0-1/16	3 36′	7.10 x 15	24	24
HUMBER HAWK (English)								
Super Snipe (Mk. II)	'48	0	1	⅛	10	6.50 x 15	26	30
Hawk (Mk. III)	'49	0	0-45′H	⅛	8-15′H	5.50 x 15	26	28
Mark III	'49	0	0 45′ H	.125	8 15′ H	5.50 x 15	26	27
Pullman (Mk. II)	'49	0	1	⅛	10	7.00 x 16	26	32
Super Snipe (Mk. II)	'49	0	1	⅛	10	6.50 x 16	26	30
Hawk (Mk. III)	'50	0	0-45′H	⅛	8-15′H	5.50 x 15	26	28
Super Snipe (Mk. II)	'50	0	1	⅛	10	6.50 x 16	26	30
Pullman (Mk. II)	'50	0	1	⅛	10	7.00 x 16	26	32
JAGUAR (English)								
1½ Litre, Saloon	'46-'48	4½	2	⅛	8½	5.25 x 18	28	28
2½ Litre, S & C	'46-'48	3	2½	⅛	7½	5.50 x 18	28	30
3½ Litre, S & C	'46-'48	3	2½	⅛	7½	5.50 x 18	28	30
2½ Litre, S&C, Mk. V	'49	—¾	1¾-2	1/8-3/16	5	6.70 x 16	23	25
3½ Litre, S&C, Mk. V	'49	—¾	1¾-2	1/8-3/16	5	6.70 x 16	23	25
3½ Litre, XK, 120 S.S.	'49	4¾-5¼	1¾-2	1/8-5/16	5	6.00 x 16	25	25
KAISER								
K-100	'47	—1° to +1°	0° to ¾°	1/16	5½-6	6.50 x 15	28	28
K-100-101-481-482	'48	—0 to 1‡‡	0 to +¾‡‡‡	1/16	4½-5½	6.50 x 15T	28	28
Series K-491, 492	'49	±1‡‡	0-¾‡‡‡	0- 1/16‡‡	4¾-5¾k	7.10 x 15	24C	24C
K-491, 492	'50	±1‡‡	0-¾‡‡‡	0-1/16‡‡	4¾-5¾k	7.10 x 15	24C	24C

For key to abbreviations see page 135

WHEEL ALIGNMENT AND TIRES

Make and Model	Year	Caster—Degrees	Camber—Degrees	Toe-in—Inches	King Pin Inclination—Degrees	Tire Size	Pressure—Front	Pressure—Rear
LINCOLN								
Continental	'41	4	3/4	1/16	4	7.00 x 16	26	26
Linc. & Linc. Cont.	'47	1 1/2 to 6	1/4 to 3/4	1/16-1/8	4	7.00 x 15	26	26
Linc. & Linc. Cont.	'48	1 1/2 to 6	1/4 to 3/4	1/16-1/8	4	7.00 x 15	26	26
Linc. & Linc. Cont.	'49	(Not distributed in Canada)						
Linc. & Linc. Cont.	'50	(Not distributed in Canada)						
MERCURY								
Mercury	'41	8	1	1/16	8	6.50 x 16	28	28
Mercury	'42	8	1	1/16	8	5.60 x 15	28	28
114 & 114X	'46	7 15′	1	1/16	8	6.00 x 16	28	28
118	'46	7 15′	1	1/16	8	6.50 x 15	26	26
114, 114X	'47	5 1/4 to 7 1/4	3/4 to 1 1/4	1/16-1/8	8	6.00 x 16	28	28
118	'47	5 1/4 to 7 1/4	3/4 to 1 1/4	1/16-1/8	8	6.50 x 15	26	26
118	'48	5 1/4 to 7 1/4	3/4 to 1 1/4	1/16-1/8	8	6.50 x 15	26	26
Mercury	'49	0+30′	0+45′	1/16-1/8	5	7.10 x 15	24	24
Mercury	'50	+1/2 to —1	0 to +3/4	3/32-5/32	5	7.10 x 15	24	24
METEOR								
Meteor	'49	0 to —3/4	—1/4 to +3/4	1/16-1/8	5	6.00 x 16TS	28	28
Meteor	'50	+0°30′ to —1	0 to +1	1/16-1/8	5 1/4	6.70 x 15	24	21
MG (English)								
T.C.	'48	5 1/2	3	3/16	7 1/2	5.00 x 19	24	26
Series Y	'49	1±1/2	0	0	10	5.25 x 16	23	25
Series TD	'50	2±.5	1	—	9-10 1/2	5.50 x 15	18	18
Series Y	'50	2	—	—	10	5.25 x 16	25	25
MONARCH								
V-8	'46	7 15′	1	1/16	8	6.50 x 15	26	26
V-8	'47	5 1/4 to 7 1/4	3/4 to 1 1/4	1/16-1/8	8	6.50 x 15	26	26
V-8	'48	5 1/4 to 7 1/4	3/4 to 1 1/4	1/16-1/8	8	6.50 x 15	26	26
V-8	'49	0+30′	0+45′	1/16-1/8	5	7.10 x 15	24	24
V-8	'50	+1/2 to 1—1	0 to +3/4	3/16-5/32	5	7.10 x 15	24	24
MORRIS (English)								
8 Series E	'48	2 1/2	2 1/2	1/8	6 1/2	4.50 x 17	24	27
10 Series M	'48	1 1/2	2 1/2	1/8	6 1/2	5.00 x 16	25	27
Minor	'48	3	Nil	5/32	8 1/2	5.00 x 14	22	22
Oxford	'48	3	Vertical	3/32	9	5.50 x 15	22	22
Oxford	'49	3	Vertical	3/32	9	5.50 x 15	22	22
Minor	'49	3	Nil	3/32	8 1/2	5.00 x 14	22	22
Six	'49	3	0	3/32	9	6.00 x 15	22	24
Minor	'50	3	Nil	3/32	8 1/2	5.00 x 14	22	22
Oxford	'50	3	Vertical	3/32	9	5.50 x 15	22	22
Six	'50	3 (m)	0 (M)	3/32	9(k)	6.00 x 15	22	24
NASH								
Ambassador 600	'41	0-1/2		0-1/16	5 1/2	5.50 x 16	28	28
Ambassador 6	'41	0	1/4	1/32	4 1/2	6.25 x 16	28	28
Ambassador 8	'41	0	1/4	1/32	4 1/2	5.60 x 15	26	26
4240-"6"	'42	0	0	0	5 1/2	5.50 x 16	28	28
4260-"6"	'42	0	1/4	1/32	4 1/2	6.25 x 16	28	28
4280-"8"	'42	0	1/4	1/32	4 1/2	6.50 x 16	26	26

For key to abbreviations see page 135 *(Continued on page 132)*

WHEEL ALIGNMENT AND TIRES

Make and Model	Year	Caster—Degrees	Camber—Degrees	Toe-in—Inches	King Pin Inclination—Degrees	Tire Size	Pressure—Front	Pressure—Rear
NASH—(Continued)								
Series 4640	'46	1/4-3/4	1/4 to + 3/4	1/8-3/16	7 1/2	6.00 x 16	25	25
Series 4660	'46	0 to —1/2	1/4 to + 3/4	1/32-5/32	4 1/2	6.50 x 15	28	28
Series 4740	'47	1/4 to 3/4	1/4 to + 3/4	1/8-5/16	7	6.00 x 16	25	25
Series 4760	'47	0 to 1/2	1/4 to + 3/4	1/16-3/16	5	6.50 x 15	28	28
Series 4840	'48	1/4 to + 3/4	1/4 to + 3/4	1/8-3/16	7	6.40 x 15	24	24
Series 4860	'48	0 to —1/2	1/4 to + 3/4	1/16-3/16	7	7.10 x 15	24	24
Series 4940	'49	0 to + 1/2	—1/4 to + 1/4‡‡	1/16-3/16	8 1/2	6.40 x 15	24	24
Series 4960	'49	0 to + 1/2‡	—1/4 to + 1/4‡‡	1/16-3/16	8 1/2	7.10 x 15	24	24
Canadian Statesman	'50	0- + 1/2	—1/4 + 1/4‡‡	1/8-5/16	8 1/2	6.40 x 15	24C	24C
Statesman (U.S.)	'50	0- + 1/2	—1/4- + 1/4‡‡	1/8-5/16	8 1/2	6.40 x 15	24 C	24C
Ambassador (U.S.)	'50	0- + 1/2	—1/4- + 1/4‡‡	1/8-5/16	8 1/2	7.10 x 15	24C	24C
Rambler (U.S.)	'50	3/4- + 1 1/4	1/4- + 3/4	1/8-1/4n	8 1/2	—	—	—
OLDSMOBILE								
Six	'41	0	—1/4	1/16	4°51′10″	b	c	c
Eight	'41	0	—1/4	1/16	4°51′10″	6.50 x 16	26	26
Six	'42	0	—1/4	1/16	4°51′10″	b	c	c
Eight	'42	0	—1/4	1/16	4°51′10″	6.50 x 16	26	25
Six	'46	0 to —3/4	—1/4 to + 3/4	1/16-1/8	4 51′	6.50 x 16	28	28
Eight	'46	0 to —3/4	—1/4 to + 3/4	1/16-1/8	4 51′	6.50 x 16	28	28
Six	'47	0 to —3/4	—3/4 to + 3/4	1/16-1/8	4 51′	6.50 x 16@	28	28
Eight	'47	0 to —3/4	—3/4 to + 3/4	1/16-1/8	4 51′	6.50 x 16@	28 #	28 #
Six, 3500 (IJ)	'48	0 to —3/4	—3/4 to + 3/4	1/16-1/8	4 51′	6.50 x 16	28	28
Six, 3500 (AJ)	'48	0 to —3/4	—3/4 to + 3/4	1/16-1/8	4.51′	7.10 x 15	24	24
Eight, 3700 (IJ)	'48	0 to —3/4	—3/4 to + 3/4	1/16-1/8	4 51′	6.50 x 16	28	28
Eight, 3700 (AJ)	'48	0 to —3/4	—3/4 to + 3/4	1/16-1/8	4 51′	7.60 x 15	24	24
Series 76, 78 & 98	'48	(Not distributed in Canada)						
Six	'49	0 to —3/4	—1/4 to + 3/4	1/16-1/8	4 29′ 47″	7.10 x 15	24	24
Eight	'49	0 to —3/4	—1/4 to + 3/4	1/16-1/8	4 29′47″	7.60 x 15	24	24
Eight ("88")	'50	0 to —3/4	—3/4 to + 3/4	1/16-1/8	4 29′47″	7.60 x 15	24	24
Six ("76")	'50	0 to —3/4	—1/4 to + 3/4	1/16-1/8	4 29′47″	7.00 x 15	22	24
PACKARD								
110	'41	1/2	1/2	0	2 1/2	6.50 x 15	26	28
120	'41	1/2	1/2	0	2 1/2	7.00 x 15	26	28
Super 8	'41	1/2	1/2	0	2 1/2	7.00 x 16	26	28
"6"-2000	'42	—1	1/4	0	5 1/2	6.50 x 15	26	28
"8"-2001	'42	—1	1/4	0	5 1/2	6.50 x 15	28	28
Super 8, 2003, 6	'42	—2	1/4	0	5 1/2	7.00 x 16	28	28
2100	'46	—1 ± 1/2	0 ± 1/4	—0 + 1/16—0	5 35′	6.50 x 15	26	28
2101 & 2111	'46	—1 ± 1/2	0 ± 1/4	—0 + 1/16—0	5 35′	6.50 x 15	28	28
2103 & 2126	'46	—1 ± 1/2	0 ± 1/4	—0 + 1/16—0	5 35′	7.00 x 15	28	28
2126	'46	—2 ± 1/2	0 ± 1/4	—0 + 1/16—0	5 35′	7.50 x 16	30	30
2100	'47	—1 ± 1/2	0 ± 1/4	—0 + 1/16—0	5 35′	6.50 x 15	28	28
2101 & 2111	'47	—2 ± 1/2	0 ± 1/4	—0 + 1/16—0	5 35′	6.50 x 16	30	30
2103 & 2106	'47	—2 ± 1/2	0 ± 1/4	—0 + 1/16—0	5 35′	7.00 x 16	30	30
2126	'47	—2 ± 1/2	0 ± 1/4	—0 + 1/16—0	5 35′	7.50 x 16□	30	30
2130	'47	—2 ± 1/2	0 ± 1/4	—0 + 1/16—0	5 35′	7.00 x 15□	28	28
2201, 2211	'48	—1 ± 1/2	0 ± 1/4	0 + 1/16—0	5 50′	7.60 x 15x	24	24
2202, 2232	'48	—1 ± 1/2	0 ± 1/4	0 + 1/16—0	5 50′	8.20 x 15	24	24
2206, 2233	'48	—2 ± 1/2	0 ± 1/4	0 + 1/16—0	5 50′	8.20 x 15	24	24
2301	'49	—1 ± 1/2	0 ± 1/4	0 + 1/16—0	5 50′	7.60 x 15	24	24
2302, 2332	'49	—1 ± 1/2	0 ± 1/4	0 + 1/16—0	5 50′	7.60 x 15(p)	24	24
2306, 2333	'49	—1 ± 1/2	0 ± 1/4	0 + 1/16—0	5 50′	8.20 x 15	24	24
2301	'50	1 ± 1/2	0 ± 1/4	0 + 1/16—0	5 50′	7.60x15	24	24
2302, 2332	'50	1 ± 1/2	0 ± 1/4	0 + 1/16—0	5 50′	7.60x15(p)	24	24
2306, 2333	'50	1 ± 1/2	0 ± 1/4	0 + 1/16—0	5 50′	8.20 x 15	24	24

For key to abbreviations see page 135

WHEEL ALIGNMENT AND TIRES

Make and Model	Year	Caster—Degrees	Camber—Degrees	Toe-in—Inches	King Pin Inclination—Degrees	Tire Size	Pressure—Front	Pressure—Rear
PLYMOUTH								
Roadking P-11	'41	0*	+1/4	0‡	4 3/4	6.00 x 16	28	28
De Luxe P-12	'41	0*	+1/4	0‡	4 3/4	6.00 x 16	28	28
De Luxe P-14	'42	0*	+1/4	0‡	4 3/4	6.00 x 16	28	28
P-15	'46	0±1	+1/4	0	4 3/4-6	6.00 x 16	28	28
P-15	'47	—1 to +1*	0 to +3/4P	0-1/16	4 3/4-6	6.00 x 16	28	28
P-15	'48	—1 to +1*	0 to +3/4P	0-1/16	4 3/4-6	6.70 x 15	24	24
P-17, P-18	'49	—1 to +1	0 to 3/4‡‡	0-1/16	4 3/4-6	6.40 x 15p	24C	24C
P-19, P-20	'50	—1 to +1	0 to 3/4‡‡	0-1/16	4 3/4-6	6.40 x 15p	24C	24C
PONTIAC								
Fleetleader	'41	0	—1/4	0	4 3/4	6.00 x 16	26	28
Torpedo 6	'41	—1/2	0	0	4 3/4	6.00 x 16	26	28
Fleetleader 6	'42	0	—1/4	0	4 3/4	6.00 x 16	26	28
Torpedo 6 & De Luxe	'42	—1/2	0	0	x	6.00 x 16	26	28
Six	'46	0±1/2	—1/4±1/2	0-1/16	4 3/8-4 7/8	6.00 x 16y	26z	26z
Eight	'46	—1/2 to —1	1/4 to —1/4	0-1/16	4 3/8-4 7/8	6.00 x 16y	28	28
Six	'47	—1/2 to —1§	+1/4 to —1/4‡‡	0-1/16	4 3/8-4 7/8	†††	†††	†††
Eight	'47	—1/2 to —1§	+1/4 to —1/4‡‡	0-1/16	4 3/8-4 7/8	†††	†††	†††
Six 2000-2200....(1J)	'48	—0±1/2	—1/4±1/2	0-1/16	4 3/8-4 7/8	6.00 x 16	28	28
Six 2000-2200....(AJ)	'48	—0±1/2	—4±1/2	0-1/16	4 3/8-4 7/8	6.70 x 15	24	24
Six 2500....(1J)	'48	—1/2 to —1	+1/4 to —1/4‡‡	0-1/16	5	6.00 x 16	28	28
Eight 2700....(AJ)	'48	—1/2 to —1	+1/4 to —1/4‡‡	0-1/16	5	7.10 x 15	24	24
Six 2000, 2200, 2500(P)	'49	—1/2 to —1	0±1/4	0-1/16	5	7.10 x 15	24	24
Eight	'49	—1/2 to —1	0±1/4	0-1/16	5	7.10 x 15	24	24
Six-2000, 2200, 2500(P)	'50	—3/4	—	0-1/16	5 1/2	7.10 x 15	24	24
Eight-2700	'50	—3/4	—	0-1/16	5 1/2	7.10 x 15	24	24

N.B. Fleetleaders (1941-2-6-7-8) are 20 and 22 Series; Torpedo 6 & 8 (1941-2-6-7-8) are 25 and 27 Series respectively. Streamliner 6 & 8 (1941-2-6-7-8) are 26 and 28 Series respectively; Streamliner 6 & 8 (1948) not distributed in Canada.

PREFECT (English)								
Four Cylinder	'49	8 20'a	2 16'(a)	1/16-1/8	7 6'(A)	2.00 x 16	24	24
Four Cylinder	'50	7 20'-8 20'	1 54'-2 16'	1/16-1/8	6°54'-7°6'	5.00 x 16	24	24
RILEY (English)								
100 h.p 2 1/2-Litre	'49	3		0	11	6.00 x 16	24	24
1 1/2 Litre	'46-'50	3	1	n	11	5.75 x 16	22	24
2 1/2 Litre	'47-'50	3	1	n	11	6.00 x 16	24	24
ROVER								
75	'49	4-6	1/2 to +2	0-1/8	6-8	5.75 x 16	24m	24m
75	'50	—1±1	2±1	0-1/8	3 1/2±1	6.00 x 15	28	24
Land Rover	'50	3	1 1/2	3/64-3/32	7	6.00 x 16	20	26*
STUDEBAKER								
Commander 6 (11A)	'41	—1/4	1/2	1/8	5 1/2	6.25 x 16	28	28
Champion 6 3-G	'41	1	1/2	1/8	5 1/2	5.50 x 16	26	30
Commander 6 (12A)	'42	—1/4	1/2	1/8	5 1/2	6.25 x 16	28	28
President 8 (8C)	'42	—1/4	1/2	1/8	5 1/2	7.00 x 15	26	26
Champion 6 (4G)	'42	1	1/2	1/8	5 1/2	5.50 x 16	26	28
Skyway, 5G	'46	1	1/2	1/8	5 1/2	5.50 x 16		28

(Continued on page 134)

For key to abbreviations see page 135

WHEEL ALIGNMENT AND TIRES

Make and Model	Year	Caster—Degrees	Camber—Degrees	Toe-in—Inches	King Pin Inclination—Degrees	Tire Size	Pressure—Front	Pressure—Rear
STUDEBAKER—(Continued)								
President 8 (8C)	'46	—1/4	1/2	1/8	5 1/2	7.00 x 16	28	28
Champion 6G	'47	1 1/2N	1/2	1/16-1/8	5 1/2	5.50 x 16	28	26
Commander 14A	'47	1 1/2N	1/2	1/16-1/8	5 1/2	5.60 x 15	24	20
Champion 7G	'48	0 to +1	0 to 1$$	1/16-1/8	5 1/2	5.50 x 15	28	26
Commander 15A	'48	0 to + 1$	0 to 11$$	1/16-1/8	5 1/2	6.50 x 15	24	24
Champion—8-G	'49	+1/2 to +1 1/2	0 to +1	1/16-1/8	5 1/2	6.40 x 15	28	24
Commander—16-A	'49	—2 to—3	0 to +1	1/16-1/8	5 1/2	6.40 x 15	26	22
Champion 9G	'50	+1—1S	0-+1s	1/16-1/8	5 1/4	6.40 x 15	26	24
Commander 17A	'50	1/2—2 1/2S	0-+1s	1/16-1/8	5 1/4	6.40 x 15	24	20
SUNBEAM TALBOT (English)								
90	'50	4	1 1/2	1/8	7 1/2	5.50 x 16	24	26
TRIUMPH (English)								
Series TRD (1800)	47-48	6	1-2	0	—	5.75 x 16	24	26
Series TRA	'49	6	1-2	0	—	5.75 x 16	24	26
VANGUARD (English)								
Sedan & Est. car	'49	1	2	V	7 1/2	5.75 x 16	26	28
Sedan & Est. Car	'50	1	2	V	7 1/2	5.75 x 16	26	28
VAUXHALL LIP (English)								
Velox	'49	9 34′	1/2	1/32-3/32	5 25′6″	5.25 x 16	25	30
Velox	'50	9 34′	1/2	1/32-3/32	5 25′ 6″	5.25 x 16	25	30
WILLYS								
Willys Americar	'41	3	2	1/16	7 1/2	5.50 x 16	26	26
Willys Americar	'42	3	2	1/16	7 1/2	5.50 x 16	26	28
CJ-2A Universal Jeep	'45	3	1 1/2	3/64-3/32	7 1/2	6.00 x 16	28	28
CJ-2A Universal Jeep	'47	3	1 1/2	3/64-3/32	7 1/2	6.00 x 16	(z)	(z)
4-63 Station Wagon	'47	1	1	1/16-1/8	5	6.00 x 15	28-30	28-30
CJ-2A	'48	3	1 1/2	3/64-3/32	7 1/2	6.00 x 16	26	28
4-63	'48	1	1 1/4-1 3/4	1/16-1/8	5	6.70 x 15	20	24
2-WD	'48	4 45′	1	3/64-3/32	7 1/2	6.50 x 16□	30	45
4-WD	'48	3	1 1/2	3/64-3/32	7 1/2	7.00 x 16□	30	45
6-63	'48	1	1 1/4-1 3/4	1/16-1/8	5	6.70 x 15	20	24
CJ-2A	'49	3	1 1/2	3/64-3/32	7 1/2	6.00 x 16	26	28
4-63	'49	1	1 1/4-1 3/4	1/16-1/8	5	6.70 x 15	20	24
2 WD	'49	4 45′	1	3/64-3/32	7 1/2	6.50 x 16□	30	45
4 WD	'49	3	1 1/2	3/64-3/32	7 1/2	7.00 x 16□	30	45
6-63	'49	1	1 1/4-1 3/4	1/16-1/8	5	6.70 x 15	20	24
CJ-3A	'49	3	1 1/2	3/64-3/32	7 1/2	6.00 x 16	26	28
4-73 Sta. Wgn.	'50	1	1	1/16-1/8	5	6.70 x 15	20	24
4 x 4-63 Sta. Wgn.	'50					6.50 x 15		
6-73 Sta. Wgn.	'50	1	1	1/16-1/8	5	6.70 x 15	20	24
4-73 VJ Jeepster	'50	1	1 1/2	1/16-1/8	5	6.40 x 15	24	24
6-73 VJ Jeepster	'50	1	1 1/2	1/16-1/8	5	6.40 x 15	24	24

For key to abbreviations see page 135

WHEEL ALIGNMENT AND TIRES

Make and Model	Year	Caster—Degrees	Camber—Degrees	Toe-in—Inches	King Pin Inclination—Degrees	Tire Size	Pressure—Front	Pressure—Rear
WOLSELEY (English)								
Four-Fifty	'49	—	—	—	—	5.50 x 15	26	28
Six-Eighty	'49	3	1/4-1/2	0	9-9 1/4	6.00 x 15	24	26
Six-Eighty	'48-'50	3w	0Wo	V	9Wo	6.00 x 15	22	24
Four-Fifty	'48-'50	3	1/2	0	9	5.50 x 15	24	24

ABBREVIATIONS

a—7° 20′.

(a)—1° 54′.

@—Six-series 3500, 16x6.00; series 76, 16x6.50. Eight-series 78, 16x6.50; series 98, 15x7.00.

A—C40, 15 x 7.50.

(A)—6° 54′.

b—Series 3500, 16x6.00; series 3600, 16x6.50.

B—Chrysler 7-pass 8.20x15.

c—Series 3500, 27 pounds; series 3600, 25 pounds.

C—Cold.

(c)—2° preferred.

(e)—16 x 6.50 (30 pounds front and rear); 15 x 7.00 (28 pounds front and rear) depending upon model.

H—Plus or minus 15′.

k—5 1/2° preferred.

(k)—9° to no 2958 RHD, 5858 LHD., then 8° to no. 7958 RHD, 6064 LHD., then 9 1/2° when telescopic front dampers fitted.

K—Models 60S, 61, 62—15x7.00; model 75—16x7.50.

m—Maximum.

(m)—3° to chassis number 790 RHD. 5516 LHD., 1° after.

(M)—0° to 2958 RHD. 5858LHD., then 1° to no. 7958 RHD. 6064 LHD., then 0° when telescopic front dampers fitted.

N—Normal.

p—P-18, 15x6.70; P-17, 15x6.40.

(p)—Series 2332, 15x8.20.

P—Plus 1/4° preferred (no passenger load).

(P)—Series 2000, 2200, caster 30′ ± 30′; camber 30′ ± 30′; toe-in; 0-1/8; king pin inclination 4° ± 30′; tires 15x6.70.

(P)—Packard 2232, 15x7.00 used only on body styles 2279, 2271, 2276, 2277, and 2279. 16x7.00, 6-ply, used on 2250, 2251, 16x7.50, 6-ply, used on 2213.

s—1/2° greater camber favored on driver's side.

S—Permissible variation between size 3/4°.

T—Also 15 x 7.10 (24 pounds pressure).

(t)—15 x 8.20.

(T)—15 x 6.70.

TS—16 x 6.00, 28 pounds front and rear.

V—Parallel.

w—3° to chassis no. 3747 RHD, 6550 LHD; 1° after.

Wo—0° to chassis no. 4429 RHD, 6689 LHD., then 1° to chassis 5571 RHD, 6821 LHD., then 0° when telescopic front dampers fitted.

W—In winter inflate two pounds higher.

x—Torpedo 6, 4 3/4°; Deluxe 5 1/2, 6°.

(x)—D34, 7 pass. sedan 8.20x15. D35, 6.40x15, D36, 6.70x 15.

X—Series 51, 53—16x6.00; series 52, 54—15x6.50.

y—Series 2600, 2800—16x6.50.

Y—16x6.00—26 pounds cold, 29 pounds hot. 15x6.50—26 pounds cold, 29 pounds hot.

z—Series 2500—28 pounds.

(z)—CJ-2A, Universal Jeep—front and rear; full pay load 28-30 pounds. Ordinary service 20-22 pounds, farm work 18-20 pounds.

Z—16x6.00—30 pounds cold, 33 pounds hot. 15x6.50—30 pounds cold, 33 pounds hot.

*—Non-adjustable.

**—At 3/8° camber.

†—D24 seven passenger sedan—16x6.50, 28 lbs. pressure front and rear.

††—Series 61, 62, 60S. Series 75 passenger car—24 and 32 75 commercial, depends on body.

†††—Series 2500, 2700, 2800, 6.50x16; 28 pounds front and rear. Series 2000, 2200—6.00x16; 26 front, 28 rear.

‡—With weegee board.

‡‡—Zero preferred.

‡‡‡—1/4° preferred.

∅—After series 6423870, 5421704, 8430644, 3421275—positive 1/2 to negative 1/2°.

§—3/4° desired.

□—Six ply.

#—Oldsmobile eight, series 98, front and rear tire pressure 24 pounds.

$—After serial numbers 4276053, 4276102, 4276243 caster is 2° to 3°.

$$—With 1/2° more on the left side of car.

COOLING AND LUBRICATION

Make and Model	Year	Cooling System—Capacity, Imp. Qts.	Lower Radiator Hose—Diameter and Length	Upper Radiator Hose—Diameter and Length	Fan Belt Type and Size	Crankcase Capacity—Imp. Qts.	S.A.E. Grade—Summer	S.A.E. Grade—Winter	Transmission Oil Capacity—Lbs.	S.A.E. Grade—Summer	S.A.E. Grade—Winter	Rear Axle Oil Capacity—Lbs.	S.A.E. Grade—Summer	S.A.E. Grade—Winter
ANGLIA (English)														
Four Cylinder	'49	6	—	E	—	2	30	20	2	140	140	1	140	140
Four Cylinder	'50	6	E	E	V-41	2	30	10	1P	EP90	EP80	1P	EP140	EP90
AUSTIN (English)														
A.40	'48	12½	—	—	ET	7½P	30	10W	2¼P	50	30	2¾	EP140	EP90
A-40 Dev & Dor.	'49	6¼	1¼x11½	1¼x9½	V127x34"	7½P	30	40	2¼P	90	40	2¾P	EP140	EP90
A-40 Dev.&Dor.	'50	6¼	1¼x11½	1¼x9½	V-127x34	7½P	30	20	2¼P	90	40	2¾P	EP40	EP90
BUICK														
Sp. 44; Sup. 45	'41	11	1 9/16xE	1 9/16xE	V-45 1/2x53 64	5	20	10W	1½	EP90	EP80	3	Hy90	Hy80
Series 46, 47	'41	14	1 9/16xE	1 9/16xE	V-49 1/2x15 16	6¾	20	10W	2¼	EP90	EP80	3	Hy90	Hy80
Series 49	'41	14	1 9/16xE	1 9/16xE	V-49 1/2x15 16	6¾	20	10W	2¼	EP90	EP80	3	Hy90	Hy80
Series 44	'42	11	1 9/16xE	1 9/16xE	V-45 1/2x53 64	5	20	10W	1½	EP90	EP80	3	Hy90	Hy80
Series 46	'42	14	1 9/16xE	1 9/16xE	V-49 1/2x15 16	6¾	20	10W	2¼	EP90	EP80	3	Hy90	Hy80
Series 50	'46	11	1 9/16xE	1 9/16xE	—	4¾	20	10W	1¾	EP90	EP80	3	Hy90	Hy80
Series 70	'46	14	1 9/16xE	1 9/16xE	—	6	20	10W	2½	EP90	EP80	3	Hy90	Hy80
Series 40	'47	11	1 9/16xE	1 9/16xE	V	4¾	20	10W	1¾	EP90	EP80	3	Hy90	Hy80
Series 50	'47	11	1 9/16xE	1 9/16xE	V	4¾	20	10W	1¾	EP90	EP80	3	Hy90	Hy80
Series 70	'47	14	1 9/16xE	1 9/16xE	V	6	20	10W	2½	EP90	EP80	3	Hy90	Hy80
Series 40, 50, 70	'48	(Not distributed in Canada)												
Series 40, 50, 70	'49	(Not distributed in Canada)												
Series 40, 50, 70	'50	(Not distributed in Canada)												
CADILLAC														
All Series	'41	21	2x(M)	1¼x18	V-34 1/2x1 1/64	6	20	10W	2	EP90	EP90	4	EP90	EP90
All Series	'42	21	2x(M)	N	V-35 1/2x1 1/64	6	20	10W	3.3	EP90	EP90	4	EP90	EP90
V-8	'46	21	2x8 1/8	1¼xX	V-34 1/2x1 1/64	6	20	10W	3.3	EP90	EP90	4	EP90	EP90
V-8	'47	20 3/4	2x8 1/8	1¼xX	V-34 1/2x1 1/64	5 3/4	20	10W	3.3§§	EP90	EP90	4 1/16	EP90	EP90
V-8	'48	(Not distributed in Canada)												
V-8	'49	(Not distributed in Canada)												
V-8	'50	(Not distributed in Canada)												
CHEVROLET														
Six	'41	11½	1 7/16x8	1¼x5 5/8	V-42 7/8x11 16	4¼	20	10W	1¼	90	80	2¼	Hy	Hy
Six	'42	11½	1 7/16x8	1¼x5 5/8	V-42 7/8x11 16	4¼	20	10W	1¼	90	80	2¾	Hy	Hy
Six	'46	11½	1½x4 7/16	1¼x6 3/4	42 7/8x11 16	4¼	20	10W	1¼	90	80	3¾	Hy	Hy
Six	'47	12½	1½x4 7/16	1¼x6 3/4	A	4¼	20	10W	1¼	90	80	2¾	—	—
Six	'48	12½	1½x4 7/16	1¼x6 3/4	A	4¼	20	10W	1¼	90	80	3½	Hy90	Hy80
Six	'49	11½	1½x3 1/8(x)	1¾x6 3/4	V-42 7/8x11 16	4½	20	10W	1¼P	90	90	3 P	Hy90	Hy90
Six	'50	11½	1½x16½	1¼x6 3/4	V-42 7/8x11 16	4½	20	10W	1½P	90	90	3½P	Hy90	Hy90
CHRYSLER														
Royal 6 C-28	'41	15	1½xcc	1¾x6	—	4	30	20W	2⅓	90	80	2¼	EP90	EP80
N.Y. 8 C-30	'41	20	1¾xee	1¾x5½	—	5	30	20W	2⅜	**	**	2¼	EP90	EP80
Cr. Imp. C-33	'41	20	1¾xee	1¾x5½	—	5	30	20W	3⅓	**	**	4⅛	EP90	EP80
Royal 6 C-34	'42	15	1½xcc	1¾x6½	—	4	30	20W	2⅓	**	**	2¼	EP90	EP80
N.Y. 8 C 36	'42	20	1¾xee	1¾x5½	—	5	30	20W	2⅓	**	**	2¼	EP90	EP80
Cr. Imp. C-37	'42	20	1¾xee	1¾x5½	—	5	30	20W	3⅓	**	**	4⅛	EP90	EP80
C-38W, C-38S	'46	15	1½x(cd)	1¾x6¾	V-18 13 32x¾	4	‡‡	‡‡	2⅓(w)	90#	80#	2¾	Hy90	Hy80
Six C-38W, C-38S	'47	15	1½x(cd)	1¾x6¾	V-18 13 32x¾	4	20	10W	2⅓#	90#	80#	2¾	Hy80	Hy80
Eight C-39, C-40	'47	22	1¾x(cb)	1¾x6½	V-18x¾	5	20	10W	2⅓#	90#	80#	3	Hy90	Hy80
C-38W, C-38S	'48	15	1½x(cd)	1¾x6¾	V-18 13 32x¾	4	20	10W	2⅓#	90#	80#	2¾	Hy80	Hy80
C-39, C-40	'48	22	1¾x(cb)	1¾x6½	V-18x¾	5	20	10W	2⅓#	90#	80#	3	Hy90	Hy80

(Continued on page 139)

For key to abbreviations see pages 145-146

TiteSeal

ENGINEERED FOR THE CANADIAN AUTOMOTIVE AND AVIATION INDUSTRIES

Meets Every Automotive Gasketing Joint-sealing and Leak-proofing need

NUMBER 2 *(NON-HARDENING)*—

a sealing compound used with or without gaskets on finely machined joints . . . is soft . . . dries slowly and remains pliable. TITESEAL No. 2 is used on engine sections, sump gaskets, thermostat housings, triple connector threads, channel plugs, air control valves, dump valve guides, water separator glasses, differential housings, water hose connections, valve covers . . . crankcases and many other gasketing applications.

TITESEAL No. 2 prevents corrosion on battery posts and cable connections . . . stops wick action and prevents oil and grease from penetrating washed felts and grease retainer rings. It is an excellent lubricant for spring leaves, rubber shackles, speedometer cables and for carburetor connections.

2½ oz. Tubes	12 Tubes (per carton)
10 oz. Tubes	12 Tubes (per carton)
4/5 Gal. Can	4 Cans (per carton)

NUMBER 4 *(AVIATION GRADE)*—

a specially compounded liquid for quick application . . . for hundreds of automotive gasketing and leak-proofing uses. It will not settle out, therefore needs no stirring or mixing. It is made for quick application with a brush . . . flows on easily and quickly, no sagging . . . no unevenness . . . will not flow away from the application. Remains tacky and flexible.

TITESEAL No. 4 produces an elastic, heat-and pressure-resisting film that is leak-proof to gasoline, hot and cold oil, water, alcohol and gas. Its elasticity is not affected by temperature changes. When applied to studs and bolts, it leaves a thin microscopic film that does not wipe off when assembling with nuts. It can be used on old or new gaskets, wherever leakage or corrosion might occur. It prevents loss of compression . . . water and oil seepage . . . "freezing" of metal parts. It keeps gaskets soft and pliable . . . prevents them from rotting, swearing oil and blowing.

4 oz. Cans	24 Cans (per carton)
16 oz. Cans	12 Cans (per carton)
4/5 Gal. Cans	4 Cans (per carton)

RADIATOR SPECIALTY CO. OF CANADA LTD.

TORONTO, CANADA

COOLING AND LUBRICATION

Make and Model	Year	Cooling System—Capacity, Imp. Qts.	Lower Radiator Hose—Diameter and Length	Upper Radiator Hose—Diameter and Length	Fan Belt Type and Size	Crankcase Capacity—Imp. Qts.	S.A.E. Grade—Summer	S.A.E. Grade—Winter	Transmission Oil Capacity—Lbs.	S.A.E. Grade—Summer	S.A.E. Grade—Winter	Rear Axle Oil Capacity—Lbs.	S.A.E. Grade—Summer	S.A.E. Grade—Winter
CHRYSLER—(Continued)														
Six C-45	'49	13.6	(C)	1¾(f)	V18½x¾	4	30	10W	2¾R	80	80	3¼	Hy90	Hy80(X)
Eight C-46, C-47	'49	17.5	(cb)	1¾(f)	V18x¾	5	30	10W	2½P	10W	10W	3½	Hy90	Hy80
Six	'50	13.6	1½x5½ 1½x3½	1¾F	V-18½x¾	4	30	10W	2¼P	80	80	3¼	Hy90	Hy80(x)
Eight	'50	17.5	1¾(cb)	1¾F	V-18x¾	5	30	10W	2½P	10W	10W	3½	Hy90	Hy80
CROSLEY														
CC (Up to 41547)	'47	4U	1 1/16x16½	1 1/16x11⅜	V34 34x.719	2	30	20	1½	90	90	1	Hy90	Hy90
CC, CD to 106039	'48	4U	1 1/16x16½	1 1/16x11⅜	V34 34x.719	2	30	20	1½	90	90	1	Hy90	Hy90
CD (After 106039)	'49	4U	1 1/16x16½	1 1/16x11⅜	V34 34x.719	2	30	20	1½	90	90	1	Hy90	Hy90
Crosley	'50	4U	1 1/16x17	1 1/16x12¾	V-34x.719	2	30	20c	1P	90	90	1½	P90	Hy90
DE SOTO														
Six S-8	'41	15	1½xR	1¾x6	V-48 9/16x¾	4	30	20W	2⅛	**	**	2¾	EP90	EP80
Six S-10	'42	15	1½xR	1¾x6	V-48 9/16x¾	4	30	20W	2⅛	**	**	2¾	EP90	EP80
S-11	'46	15	1½x(cd)	1¾x6	V-18 13/32x¾	4	‡‡	‡‡	2½	10W	10W	2¾	Hy90	Hy80
S-11	'47	15	1½x(cd)	1¾x6¾	V-18 13/32x¾	4	20	10W	2½	10W	10W	2¾	Hy90	Hy80
S-11	'48	15	1½x(cd)	1¾x6¾	V-18 13/32x¾	4	20	10W	2½	10W	10W	2¾	Hy90	Hy80
S-13 Custom	'49	13.6	C	1¾(f)	18½x¾	4	30	10W	2½P	10W	10W	2¼	Hy90	Hy80
S14	'50	13.6	—	1¾F	18½x¾	4	30	10W	2½P	10W	10W	2¼	Hy90	Hy80
DODGE														
Kings. 6 D-20	'41	14	1½xcc	1¾x6	—	4	30	20W	2⅛	90	80	2¾	EP90	EP80
De L. 6 D-21	'41	14	1½xcc	1¾x6	—	4	30	20W	2⅛	90	80	2¾	EP90	EP80
L. Liner D-19	'41	16	1½xcc	1¾x6	—	4	30**	20W**	2⅛	90	80	2¾	EP90	EP80
De Luxe D-23	'42	14	1½xcxc	1¾x6	—	4	30	20W	2⅛	90	80	2¾	EP90	EP80
Custom D-22	'42	14	1½xcxc	1¾x6	—	4	30	20W	2⅛	90	80	2¾	EP90	EP80
D 24	'46	13	1½x(cc)	1¾x6	V-18 13/32x¾	4	‡‡	‡‡	2⅛	90	90∅	2¾	Hy90	Hy80
D 25	'46	14	1½x(cc)	1¾x6	V-18 13/32x¾	4	‡‡	‡‡	2⅛	90	90∅	2¾r	Hy90	Hy80
D-25	'47	14	1½x(C)	1¾x6	V-18 13/32x¾	4	20	10W	2⅛	90	80	2¾	Hy90	Hy80
D-24	'47	14	1½x(C)	1¾x6	V-18 13/32x¾	4	20	10W	2⅛	90	80	2¾r	Hy90	Hy80
D-25	'48	14	1½x(C)	1¾x6	V-18 13/32x¾	4	20	10W	2⅛	90	80	2¾	Hy90	Hy80
D-24	'48	14	1½x(C)	1¾x6	V-18 13/32x¾	4	20	10W	2⅛	90	80	2¾r	Hy90	Hy80
D-30	'49	12	C	1¾(f)	V-18½x¾	4	30	10W	2¼	80	80	3½(s)	Hy90	Hy80
D31, D32	'49	12	C	1¾(f)	V-18½x¾	4	30	10W	2¾	80	80	3¼	Hy90	Hy80
D34-D35-D36	'50	12	1½x3½ 1½x5½	1¾F	V-18½x¾	4	30	10W	2¼	80	80	3¼	Hy90 d-D34, 7 pass, 3½	Hy80
FORD														
V-8 85	'41	AA	1¾x7⅞	1¾x19⅝	V-51¼x⅝	4	30	20W	2¾	90	80	2½	EP90	EP80
V-8 85	'42	AA	1¾x5¾	1¾x22	V-36x⅝	4	30	20W	2¾	90	80	2½	EP90	EP80
De Luxe	'46	17	1.75	1.75	V-36 33x51/64	4¾	30	20	2¾	EP90	EP80	2.1	EP140	EP90
Super De Luxe	'46	17	1.75	1.75	V-36 33x51/64	4¼	30	20	2¾	EP90	EP80	2.1	EP140	EP90
DeL. & Sup. DeL.	'47	17	1¾x5¾	1¾x18⅛	V-36 33x51/64	9½	30	20	2.75	EP90	EP80	2.1	EP140	EP90
DeL. & Sup DeL.	'48	17	1¾x5¾	1¾x18⅛	V-36 33x51/64	9½	30	20	2.75	EP90	EP80	2.1	EP140	EP90
V-8	'49	17	1¾x6	1¼E	V	4$	30	20	2.75	90	80	3	EP90	EP80
V-8	'50	19	1.75x6	1¼x14½	V-41.8x.38	7P	30	20W	3.00	80	80	2.90	EP90	EP90
FRAZER														
F-47	'47	15	1½–	1½	W-42	5U	20	10W	2½	90	80	3	Hy90	80W
F-47,47C,485,486	'48	15Us	1½x2⅝	1½x10⅞	V45 43x3/32	5U	20	10W	2.5	90	80	3	Hy90	Hy 80
F-495, 496	'49	(aa)	2⅝x1½	1½x7½	V43 43½x⅜	(bb)	20	10W	2.5‡‡‡	90	80	3	EP90	EP80
F-495, 496	'50	(aa)	2⅝x1½	1½x7½	V-43 43½x⅜	(bb)	20	10W	2.5‡‡‡	90	80	3	EP90	EP90

For key to abbreviations see pages 145-146

MOTOR MAGAZINE

SERVICE AND LEADERSHIP IN CANADA

FEATURED in this issue

Mr. Mechanic:

MOTOR MAGAZINE is your magazine. Read it every month for information, entertainment and profit.

Over 15,000 every month, from coast to coast.

PASS THIS ISSUE ALONG TO THE FOLLOWING MEN →

COOLING AND LUBRICATION

Make and Model	Year	Cooling System—Capacity, Imp. Qts.	Lower Radiator Hose—Diameter and Length	Upper Radiator Hose—Diameter and Length	Fan Belt Type and Size	Crankcase Capacity—Imp. Qts.	S.A.E. Grade—Summer	S.A.E. Grade—Winter	Transmission Oil Capacity—Lbs.	S.A.E. Grade—Summer	S.A.E. Grade—Winter	Rear Axle Oil Capacity—Lbs.	S.A.E. Grade—Summer	S.A.E. Grade—Winter
HILLMAN MINX (English)														
Mark III	'49	8	8⅜x1¾	2x9	—	3½	30	20	2P	30	20	1¾P	EP140	EP90
Mark IV	'50	5¼	—	—	V	3½	30	20	1q	30	30	1¾P	EP140	EP80
HUDSON														
Six-10	'41	10¾	1⅝x8½	1½x10	V-44²¹⁄₃₂x⁵¹⁄₆₄	3¾	30	20W	2††	EP90	EP80	2¾	EP90	EP90
Six-11, 12, 18	'41	10¾	1⅝x8½	1½x10	V-44²¹⁄₃₂x⁵¹⁄₆₄	3¾	30	20W	2††	EP90	EP80	2¾	EP90	EP90
Eight	'41	15	1⅝x10	1½x7¾	V-44²¹⁄₃₂x⁵¹⁄₆₄	6	30	20W	2††	EP90	EP80	2¾	EP90	EP90
"6"—20	'42	10¾	1⅝x8½	1½x10	V-44²¹⁄₃₂x⁵¹⁄₆₄	3¾	30	20W	2††	EP90	EP80	2¼	EP90	EP90
"6"-18, 21, 22	'42	10¾	1⅝x8½	1½x10	V-44²¹⁄₃₂x⁵¹⁄₆₄	3¾	30	20W	2††	EP90	EP80	2¾	EP90	EP90
Eights	'42	15	1⅝x10	1½x7¾	V-44²¹⁄₃₂x⁵¹⁄₆₄	6	30	20W	2††	EP90	EP80	2¾	EP90	EP90
Six-51, 52	'46	10¾	1⅝x8½	1½x10	V-44²¹⁄₃₂x⁵¹⁄₆₄	4½	30	20W	2††	EP90	EP80	2¼	EP90	EP90
Eight-53, 54	'46	15	1⅝x10	1½x7¾	V-44²¹⁄₃₂x⁵¹⁄₆₄	7	30	20W	2††	EP90	EP80	2¾	EP90	EP90
Six-171, 172	'47	10¾	1⅝x8½	1½x10	V-44²¹⁄₃₂x⁵¹⁄₆₄	4½	30	20W	2††	EP90	EP80	2¾	EP90	EP90
Eight-173, 174	'47	15	1⅝x10	1½x7¾	V-44²¹⁄₃₂x⁵¹⁄₆₄	7	30	20W	2††	EP90	EP80	2¾	EP90	EP90
Series 481, 482	'48	15	1⅝x4±1⁄₁₆	—	V-41.5x.790	6	30	10W	2	EP90	EP80	3½	Hy90	Hy90
Series 483, 484	'48	15	1⅝x4±1⁄₁₆	—	V-41.5x.790	6	30	10W	2	EP90	EP80	3½	Hy90	Hy90
Series 491, 492	'49	16	1⅝x4	1½x13⅛	V41.5x.790	6	30	10W	2	EP90	EP80	3½	Hy90	Hy90
Series 493, 494	'49	14¼	1⅝x4	1½x13⅛	V41.5x.790	6	30	10W	2	EP90	EP80	3½	Hy90	Hy90
Series 500-1-2	'50	15½	1⅝x4	1½x13⅛	V-41.5 Ox.790	6	30	10W	2	EP90	EP80	3½	Hy90	Hy90
Series 503, 504	'50	15¼	1⅝x4	1½x13⅛	V-41.5 Ox 790	6	30	10W	2	EP90	EP80	3½	Hy90	Hy90
HUMBER HAWK (English)														
Sup. Snipe Mk. II	'48	—	—	—	V	7	30	20	5P	30	30	4P	EP140	EP140
Mark III	'49	8.25	—	—	—	—	30	20	—	30	20	—	Hy90	Hy90
Hawk (Mk. III)	'49	8.5	—	—	V	5	30	20	2P	30	30	1¾P	EP90	EP90
Sup. Snipe Mk. II	'49	—	—	—	V	7	30	20	5P	30	30	4P	EP140	EP140
Pullman Mk. II	'49	—	—	—	V	7	30	20	5P	30	30	4P	EP140	EP140
Hawk (Mk. III)	'50	8.5	—	—	V	5	30	20	2P	30	30	1¾P	EP90	EP90
Sup. Snipe Mk. II	'50	—	—	—	V	7	30	20	5P	30	30	4P	EP140	EP140
Pullman Mk. II	'50	—	—	—	V	7	30	20	5P	30	30	4P	EP140	EP140
JAGUAR (English)														
1½ Litre. Sal.	'46-'48	10	—	—	(M)	6	30	20	2P	30	30	2¼P	90	90
2½ Ltre. S&C.	'46-'48	14	—	—	(M)	10	30	20	2½P	30	30	3P	90	90
3½ Ltre. S&C.	'46-'48	13	—	—	(M)	10	30	20	2½P	30	30	3P	90	90
2½ Litre. Mk.V	'49	14	—	—	(M)	10	30	20	2½P	30	30	3½P	90	90
3½ Litre. Mk.V	'49	13	—	—	(M)	10	30	20	2½P	30	30	3½P	90	90
3½ Litre KX.120	'49	13	—	—	D	12.5	30	20	2½P	30	30	3½P	90	90
KAISER														
K-100	'47	15U@	—	1½x1½	W-42	5U	20	10W	2½	90	80W	3	Hy90	Hy80W
K-100-101-481-482	'48	15U@	1½x2⅝	1½x10⅞	V45.43x⅜z	5U	20	10W	2.5	90	80	3	Hy90	Hy80
Series K-491, 492	'49	(aa)	2⅝x1½	1½x7½	V43 43½x⅜	(bb)	20	10W	2.5†††90		80	3	EP90	EP80
K-491, 492	'50	(aa)	2⅝x1½	1½x7½	V-43 43½x⅜	(bb)	20	10W	2.5††† 90		80	3	EP90	EP80
LINCOLN														
Continental	'41	22½	1¾x7.50	1¾x—	V-53¹³⁄₁₆x⅝	4¼	30	10W	2¼	90	80	3¼	EP90	EP80
Linc. & Linc. Cont.	'47	21	1½x10¾	1¾x6	V-55x¹¹⁄₁₆	9	30	10W	2⅛	90	80	3½	Hy90	Hy90
Linc. & Linc. Cont.	'48	21	1½x10¾	1¾x6	V-55x¹¹⁄₁₆	9	30	10W	2⅛	90	80	3½	Hy90	Hy90
Linc. & Linc. Cont.	'49	(Not distributed in Canada)												
Linc. & Linc. Cont.	'50	(Not distributed in Canada)												

For key to abbreviations see pages 145-146

COOLING AND LUBRICATION

Make and Model	Year	Cooling System—Capacity, Imp. Qts.	Lower Radiator Hose—Diameter and Length	Upper Radiator Hose—Diameter and Length	Fan Belt Type and Size	Crankcase Capacity—Imp. Qts.	S.A.E. Grade—Summer	S.A.E. Grade—Winter	Transmission Oil Capacity—Lbs.	S.A.E. Grade—Summer	S.A.E. Grade—Winter	Rear Axle Oil Capacity—Lbs.	S.A.E. Grade—Summer	S.A.E. Grade—Winter
MERCURY														
Mercury	'41	BB	1¾x6¾	1¾x19⅝	V-51¼x⅝	4	30	20W	2¾	90	80	2½	EP90	EP80
Mercury	'42	BB	1¾x5¾	1¾x22	V-36x⅝	4	30	20W	2¾	90	80	2½	EP90	EP80
114 & 114X	'46	17	1¾	1¾	V-36. 33x51/64	4¾	30	20	2¾	EP90	EP80	2.1	EP140	EP90
118	'46	17	1¾	1¾	V-36. 33x51/64	4¾	30	20	2¾	EP90	EP80	2.1	EP140	EP90
114, 114X & 118	'47	17	1¾x5¾	1¾x18⅛	V-36x33x51/64	9½	30	20	2.75	EP90	EP80	2.1	EP140	EP90
114, 114X & 118	'48	17	1¾x5¾	1¾x18⅛	V-36x33x51/64	9½	30	20	2.75	EP90	EP80	2.1	EP140	EP90
Mercury	'49	17	1¾x5½	1.2/E	V	4$	30	20	2.75	EP90	EP80	2.75	EP90	EP80
Mercury	'50	19	1¾x5½	1¼x15.1	V-41.8x.38	7P	30	20W	3-3½	EP80	EP80	2.5	EP90	EP80
METEOR														
Meteor	'49	17	1¾x6	1¼E		4$	30	20	2.75	90	80	3	EP90	EP80
Meteor	'50	19	1¾x6	1¼x14½	V-41.8x.38	7P	30	20W	3.00 @3.50	EP80	EP80	2.90	EP90	EP90
MG (English)														
Series TD	'50	6	1⅛x2¼	2 5/16x4	V-32x.625	4½	30	20R	1¼P	140m	80	2¼P	Hy90	Hy80
Series Y	'50	6¾	1⅛x2¼	2 5/16x4	V-32x.625	4½	30	20R	1¼P	140m	80	1½P	Hy140	Hy80
MONARCH														
Monarch	'46	17	1¾	1¾	V-36.33x51/64	4¾	30	20	2¾	EP90	EP80	2.1	EP140	EP90
Monarch	'47	17	1¾x5¾	1¾x18⅛	V-36x33x51/64	9½	30	20	2.75	EP90	EP80	2.1	EP140	EP90
Monarch	'48	17	1¾x5¾	1¾x18⅛	V-36x33x51/64	9½	30	20	2.75	EP90	EP80	2.1	EP140	EP90
Monarch	'49	17	1¾x5½	1.2/E	V	4$	30	20	2.75	EP90	EP80	2.75	EP90	EP80
V-8	'50	19	1¾x5½	1¼x15.1	V-41.8x.38	3½	30	20	3.00	EP80	EP80	2.5	EP90	EP90
MORRIS (English)														
Minor	'48	6¾	1⅝x3	1⅝x4¾	V-—x.625x32	3¼	30	20R	1½P	90Hy	80Hy	1½P	90Hy	80Hy
Oxford	'48	8¼	1 5/16x3 3/16	1½x5 5/16	V-—x.625x32	4¾	30	20R	2P	90Hy	80Hy	2P	90Hy	80Hy
Minor	'49	6¾	1⅝x3	1⅝x4¾	V-—x.625x32	3¼	30	20R	1½P	90Hy	80Hy	1½P	90Hy	80Hy
Oxford	'49	8¼	1 5/16x3 3/16	1½x5 5/16	V-—x.625x32	4¾	30	20R	2P	90Hy	80Hy	2P	90Hy	80Hy
Six	'49	10	1½x2⅞	1½x6½	V-—x.625x30	5	30	20R	2P	90Hy	80Hy	2½P	90Hy	80Hy
Minor	'50	6¾	1⅝x3	1⅝x4¾	V-—x.625x32	3¼	30	20R	1½P	90Hy	80Hy	1½P	90Hy	80Hy
Oxford	'50	8¼	1 5/16x3 3/16	1½x5 5/16	V-—x.625x32	4¾	30	20R	2P	90Hy	80Hy	2P	90Hy	80Hy
Six	'50	10	1½x2⅞	1½x6½	V-—x.625x30	5	30	20R	2P	90Hy	80Hy	2½P	90Hy	80Hy
NASH														
Ambassador 600	'41	11½	1½x3¼	1½x7¾	V-41 13/16	4	30	10W	1	70	50	3	Hy90	Hy90
Ambassador 6	'41	14	1½x3¼	1¾x14½	V-42 1/16	5	30	10W	3½	70	50	4	Hy90	Hy90
Ambassador 8	'41	13¼	1½x3¼	1¾x12	V-45	6	30	10W	3½	70	50	4	Hy90	Hy90
4240—"6"	'42	11⅞	qq	1½x7¾	V-41 13/16x25/32	4 5/32	30	10W	1	70	50	3	Hy90	Hy90
4260—"6"	'42	14 5/32	qq	pp	V-42 1/16x25/32	5	30	10W	3½	70	50	3	Hy90	Hy90
4280—"8"	'42	13⅛	qq	SS	V-45x25/32	5 25/32	30	10W	3½	70	50	4	Hy90	Hy90
Series 4640	'46	11⅞	1½x3¼(x)	1½x7¾	41 13/16x25/32	4¼	30	10W	2.7(y)	90§	80§	3	Hy90	Hy90
Series 4660	'46	14	1½x3¼(x)	1¼x15	42 1/16x25/32	5	30	10W	3½(z)	90§	80§	3	Hy90	Hy90
Series 4640	'47	11⅞	1½x3¼(x)	1½x7¾	41 13/16x25/32	4¼	30	10W	2.7(y)	70	50	3	Hy90	Hy90
Series 4660	'47	14	1½x3¼(x)	1½x7¾	42 1/16x25/32	5	30	10W	3½(z)	70	50	3	Hy90	Hy90
Series 4840	'48	13	1¼x4(x)	1¼x7½	V-¾	4	20	10W	1.7P	70(S)	50(S)	—	Hy90	Hy80
Series 4860	'48	15	1¼x4(x)	1½x7&8	V-¾	5	20	10W	—	70(S)	50(S)	—	Hy90	Hy80
Series 4940	'49	14U	1½x3¼(x)	1½x7¾	V-41 13/16x25/32	5U	20	10W	2¼PV	90	80	3PU	Hy90	Hy80
Series 4960	'49	17U	1½x3¼(x)	1¼x7&8(x)	V-42 5/16x25/32	7U	20	10W	2¼PU	90	80	4PU	Hy90	Hy80
Cdn. Statesman	'50	12½	—	—	V	4	20	10W	1¼P	90	80	2¾P	Hy90	Hy80
Statesman (U.S.)	'50	12½	—	—	V	4	20	10W	2P	90	80	2.5P	Hy90	Hy80
Ambassador (U.S.)	'50	15	—	—	V	5	20	10W	2P	90	80	3.3P	Hy90	Hy80
Rambler (U.S.)	'50	10	—	—	V	4	20	10W	1¼P	90	80	2½P	Hy90	Hy80

For key to abbreviations see pages 145-146

COOLING AND LUBRICATION

Make and Model	Year	Cooling System—Capacity, Imp. Qts.	Lower Radiator Hose—Diameter and Length	Upper Radiator Hose—Diameter and Length	Fan Belt Type and Size	Crankcase Capacity—Imp. Qts.	S.A.E. Grade—Summer	S.A.E. Grade—Winter	Transmission Oil Capacity—Lbs.	S.A.E. Grade—Summer	S.A.E. Grade—Winter	Rear Axle Oil Capacity—Lbs.	S.A.E. Grade—Summer	S.A.E. Grade—Winter
OLDSMOBILE														
Six	'41	14¾	1¾x13	1½x8¾	V-44 11/16x13/16	4.4	20	10W	1½	90	80	3¾	Hy90	Hy80
Eight	'41	18	1¾x13¾	1½x8	V-44 11/16x13/16	5	20	10W	2	90	80	2½	Hy90	Hy80
Six	'42	14¾	1¾x13	1½x8¾	V-44 11/16x13/16	4.4	20	10W	1½	90	80	3¾	Hy90	Hy80
Eight	'42	18	1¾x13¾	1½x8	V-44 11/16x13/16	5	20	10W	2	90	80	2½	Hy90	Hy80
Six	'46	15	1¾x13	1½x8	V-32x44 11/16	4	20	10W	2	90	80	2½	Hy90	Hy80
Eight	'46	17	1¾x15	1½x7¼	V-32x44 11/16	5	20	10W	2	90	80	2½	Hy90	Hy80
Six	'47	15	1¾x13 3/16	1½x10⅛	V-32x44 11/16	4	20	10W	2	90	80	2½	Hyp90	Hyp80
Eight	'47	17	1¾x14	1½x10⅛	V-32x44 11/16	5	20	10W	2	90	80	2½	Hyp90	Hyp80
Six	'48	15	1¾x13 7/16	1½x10⅛	V-32x44 11/16	4	20	10W	2	90	80	2½	Hyp90	Hyp80
Eight	'48	17	1¾x14	1½x10⅛	V-32x44 11/16	5	20	10W	2	90	80	2½	Hyp90	Hyp80
Six	'49	15½	1¾x14 3/16	1½x8¼	V43 8/8x49/64	4⅛	20	10W	2P	90	90	3⅜	PHyp90	Hyp80
Eight	'49	18	1¾x13⅞	1½x9 7/16	V39 1/4x11/16	4⅛	20	10W	18P	HM	HM	3⅜	PHyp90	Hyp80
Eight ("88")	'50	18	1¾x13⅞	1½x9 7/16	V-39x3/8	4⅛	20	10W	3P	90	90	3¾	P Hyp90	Hyp80
Six ("76")	'50	15½	1¾x14 5/16	1½x8¼	V-43 8/8x49/64	4⅛	20	10W	2P	90	90	3¾	P Hyp90	Hyp80
PACKARD														
110	'41	12½	1¾x3	1¾x7½	V-49 1/4x3/4	4	30	20W	1¾	140	90	4	Hy	Hy
120	'41	14	1¾x3	2 2/8x13	V-49 1/4x3/4	5	30	20W	1¾	140	90	5¾	Hy	Hy
Super 8	'41	16¾	1¾x3	2 3/8x11½	V-52 1/4x1	6	30	20W	1¾	140	90	5¾	Hy	Hy
"6"—2000	'42	11 3/8	1¾x3 3/4	1¾x12½	V-49 1/4x3/4	4 5/32	30	20W	1¾	140	90	4	Hy	Hy
"8"—2001	'42	14 2/32	1¾x3 3/4	1¾x12½	V-49 1/4x3/4	4 33/64	30	20W	1¾	140	90	5¾	Hy	Hy
Sup. 8—2003, 6	'42	16 3/8	1¾x3 3/4	1¾x11½	V-52 1/4x1	5 25/32	30	20W	1¾	140	90	5¾	Hy	Hy
2100	'46	14	1¾x3 3/4	1¾x12 5/16		5	30	10	2	140	90	4	Hy90	Hy90
2101 & 2111	'46	17	1¾x3 3/4	1¾x12 5/16		5½	30	10	2	140	90	4	Hy90	Hy90
2103 & 2126	'46	20	1¾x3 3/4	1¾x11½		7	30	10	2	140	90	6¾	Hy90	Hy90
2100 & 2130	'47	14	1¾x3 3/4 I	1 3/4x12 5/16•	49 1/4x3/4x42°		30	10	2WO	140	90	4	Hy90	Hy90
2101 & 2111	'47	17	1¾x3 3/4 I	1 3/4x12 5/16•	49 1/4x3/4x42°	5½	30	10	2WO	140	90	4	Hy90	Hy90
2103, 2106 & 2126	'47	20	1¾x3 3/4 I	1 3/4x11½¶	52 1/4x1x42°		30	10	2WO	140	90	6 3/4	Hy90	Hy90
2201, 2211	'48	18U	12 1/4x1 3/4 I	3 3/4x1 3/4 I	V48.6x3/4x40°	6	20t	10	2	140S	90S	1¼	140S	90S
2202, 2232 (a)	'48	20U	12 1/4 q 1 3/4 I	3 3/4x1 3/4 I	V48.6x3/4x40°	6	20t	10	2	140S	90S	1¼	140S	90S
2206, 2233 (b)	'48	20U	11 1/2x1 3/4 I	3 3/4x1 3/4 I	V53x1x42°	7	20t	10	2	140S	90S	1¼	140S	90S
2301	'49	17U	1¾x3 3/4 I	(a)	V48.9x3/4x40°	6	20t	10W	2P	90	90	4P	90S	90S
2302, 2332	'49	17U	1¾x3 I 1¾x3 3/4 I	(a)	V48.9x3/4x40°	6	20t	10W	2P	90	90	4P	90S	90S
2306, 2333	'49	17U	1¾x3 3/4 I	(a)	V52.9x1x42°	6	20	10W	2P	90	90	4P	90S	90S
2301	'50	17U	1¾x3 3/4 I	(a)	V48.9x3/4x40°	6	20t	10W	2P	90	90	4P	90S	90S
2302, 2332	'50	17U	1¾x3 I	(a)	V48.9x3/4x40°	6	20t	10W	2P	90	90	4P	90S	90S
2306, 2333	'50	17U	1¾x3 3/4 I	(a)	V-52.9x1x42	6	20	10W	2P	90	90	4P	90S	90S
PLYMOUTH														
Roadking P-11	'41	14	1½x(c)	1¾x9½	—	4	30	20W	2⅛	90	80	2¾	Hy90	Hy80
De Luxe P-12	'41	14	1½x(c)	1¾x9	—	4	30	20W	2⅛	90	80	2¾	Hy90	Hy80
De Luxe P-14	'42	14	1½x(c)	1¾x9	—	4	30	20W	2⅛	90	80	2¾	Hy90	Hy80
P-15	'46	14	1½x(cr)	1¾x6	V-18 13/64x3/4	4	††	††	2⅛	90	90∅	2¾	Hy90	Hy80
P-15	'47	14	1½x(C)	1¾x6	V-18 13/64x3/4	4	20	10W	2⅛	90	80	2¾	Hy90	Hy80
P-15	'48	14	1½x(C)	1¾x6	V-18 13/64x3/4	4	20	10W	2⅛	90	80	2¾	Hy90	Hy80
P-17, P-18	'49	12	p	1¾(f)	V-18 1/2x3/4	4	30	10W	2¾	80	80	3¼	Hy90	Hy80
P19-P20	'50	12	1½x3½ 1½x5½	1¾F	V-18 1/2x3/4	4	30	10W	2¾	80	80	3¼	Hy90	Hy80

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COOLING AND LUBRICATION

Make and Model	Year	Cooling System—Capacity, Imp. Qts.	Lower Radiator Hose—Diameter and Length	Upper Radiator Hose—Diameter and Length	Fan Belt Type and Size	Crankcase Capacity—Imp. Qts.	S.A.E. Grade—Summer	S.A.E. Grade—Winter	Transmission Oil Capacity—Lbs.	S.A.E. Grade—Summer	S.A.E. Grade—Winter	Rear Axle Oil Capacity—Lbs.	S.A.E. Grade—Summer	S.A.E. Grade—Winter
PONTIAC														
Fleetleader	'41	13½	1½x14½	1⅝xE	V-48 1/4x3/4	5	20	10W	1¼	90	80	2¾	EP90	EP80
Torpedo 6	'41	15	1½x15½	1¾x13½	V-48 1/4x3/4	5	20	10W	1½	90	80	3¾	EP90	EP80
Fleetleader 6	'42	12½	1½x14½	1⅝xE	V-48 1/4x3/4	4¼	20	10W	1¼	90	80	2¾	EP90	EP80
Tor. 6 & De L.	'42	15	1½x15½	1¾x13½	V-48 1/4x3/4	DD	20	10W	1½	90	80	GG	EP90	EP80
Six	'46	***	—	—	—	4¼	20	10W	1¼	90	80	2¾	EP90	EP80
Eight	'46	***	—	—	—	4¼	20	10W	1½	90	80	2¾	EP90	EP80
Six	'47	15	16½x1½	13½x1¾	490	4¼	20	10W	1¼	90	80	2¾	EP90	EP80
Eight	'47	16¼	13⅛x1½	8½x1¾	490	4¼	20	10W	1½	90	80	2¾	EP90	EP80
Six	'48	15	16½x1½	13½x1¾	490	4¼	20	10W	1¼	90	80	2¾	EP90	EP80
Eight	'48	16¼	13⅛x1½	8½x1¾	490	4¼	20	10W	1½	90	80	2¾	EP90	EP80
Six2000,2200,2500	'49	15g	1¾x17¾	1¾x13 9/16	V-40 11/16x25/32	4¼	20	10W	1½P	80-90	80-90	2¾	Hy90	Hy90
Eight	'49	16⅜	1¾x15⅛	1¾x8 15/16	V-40 11/16x21/32	4¼	20	10W	1½P	80-90	80-90	2¾	Hy90	Hy90
Six 2000,2200,2500	'50	15	1¾x17¾	1¾x13 9/16	40 11/16x25/32	4¼	20	10W	1½P	80-90	80-90	3¼P	Hy90	Hy90
Eight-2700	'50	16⅜	1¾x15⅛	1¾x8 15/16	40 11/16x25/32	4¼	20	10W	1½P	80-90	80-90	3¼P	Hy90	Hy90
PREFECT (English)														
Four Cylinder	'49	6	—	E	—	2	30	20	2	140	140	1	140	140
Four Cylinder	'50	6	E	E	V-41	2	30	10	1P	EP90	EP80	1P	EP140	EP90
RILEY (English)														
1½ Litre	'46-'50	6.5	1¼x2⅝	(M)	V	5	30	20R	2P	140	80	2¾P	140	80
2½ Litre	'47-'50	10.5	1¼x2⅝	(M)	V	7	30	20R	2P	140	80	4P	140	80
ROVER (English)														
75	'49	12	1⅜(m)	1⅜x4½i	V	8	30	20	2q	50	—	3P	90	80
75	'50	10½	1¼ID(M)	1¼ID(M)	V-12ID	7½	30	10	3½P	50	80	2¾P	90	80
Land Rover	'50	8½	1¼ID(M)	1¼ID(M)	V-12ID	5	30	10	7	50	80	3P	90	80
STUDEBAKER														
Com. 6-11A	'41	10¾	1¾xE	1¼x11½	V-47 7/8x49/64	5	30	10	2	90	90	2½	Hy90	Hy90
Pres. 8-7C	'41	12½	1¾xE	1¼x12 15/16	V-47 7/8x49/64	6¾	30	10	2	90	90	2½	Hy90	Hy90
Champ. 6-3G	'41	8¾	1¼xE	1¼x8¼	V-38 1/4x11/16	4⅛	30	10	1 11/16	90	90	2	Hy90	Hy90
Com. 6-12A	'42	10¾	1¾xE	1¼x11½	V-47 7/8x49/64	5	30	10	2	90	90	2½	Hy90	Hy90
Pres. 8-8C	'42	12½	1¾xE	1¼x12 15/16	V-47 7/8x49/64	6¾	30	10	2	90	90	2½	Hy90	Hy90
Champ. 6-4G	'42	8¾	1¼xE	1¼x8¼	V-38 1/4x11/16	4 1/16	30	10	1 11/16	90	90	2	Hy90	Hy90
Skyway, 5G	'46	8¾	1¼xE	1¼x8¼	V-38 1/4x11/16	4 1/16	30	10	1 11/16	90	90	2	Hy90	Hy90
Champ. 6G	'47	8¾	1¼xE	1¼x7	V-38 3/4x11/16	4 1/16	30	10	1 11/16	90	90	2	Hy90	Hy90
Com. 14A	'47	10.82	1¾	1¼x11	42 1/4x.802	5	30	10	2 1/4	90	90	2	Hy90	Hy90
Champion 7G	'48	10	1¼(M)	1¼(M)	38 3/4x11/16	4.14	30	10	1.2P	90	90	2.08	Hy90	Hy90
Commander 15A	'48	13	1¾(M)	1¼x11	42 1/4x.802	5.00	30	10	2P	90	90	2.50	Hy90	Hy90
Champion 8-G	'49	9.15	1¼(M)	1¼	38 3/4x11/16	4.14	20(t)	10(T)	1½P	90	90	2.08P	Hy90	Hy90
Commander 16-A	'49	10.82	1¾(M)	1¼	42 1/4x.802	5.00	20(t)	10(T)	2P	90	90	2.5P	Hy90	Hy90
Champion 9G	'50	8.35	1½(M)	1¼x7	V-39 7/8	4.14	s	1.2(p)	90	90	2.08P	—	Hy90	Hy90
Comm. 17A	'50	11¼	1¾(M)	1¼x16 15/16	V-42 1/4	5.00	s	2.0(q)	90	90	2.50P	—	Hy90	Hy90
SUNBEAM TALBOT (English)														
90	'50	10	—	—	V	5¼	30	20	2P	30	30	1P	EP140	EP140

N.B. Fleetleaders (1941-2-6-7-8) are 20 and 22 Series; Torpedo 6 & 8 (1941-2-6-7-8) are 25 and 27 Series respectively.
Streamliner 6 & 8 (1941-2-6-7-8) are 26 and 28 Series respectively; Streamliner 6 & 8 (1948) not distributed in Canada.

For key to abbreviations see pages 145-146

COOLING AND LUBRICATION

Make and Model	Year	Cooling System—Capacity, Imp. Qts.	Lower Radiator Hose—Diameter and Length	Upper Radiator Hose—Diameter and Length	Fan Belt Type and Size	Crankcase Capacity—Imp. Qts.	S.A.E. Grade—Summer	S.A.E. Grade—Winter	Transmission Oil Capacity—Lbs.	S.A.E. Grade—Summer	S.A.E. Grade—Winter	Rear Axle Oil Capacity—Lbs.	S.A.E. Grade—Summer	S.A.E. Grade—Winter
TRIUMPH (English)														
TRD (1800)	47-48	9½	—	—	—	7	30	20	2P	50	40	2¾P	EP140	EP90
Series TRA	'49	9½	—	—	—	5½	30	20	1½P	50	40	2P	Hy90	Hy90
VANGUARD (English)														
Sedan & Est. car	'49	18P	—	—	V	11P	30	20	1½P	50	40	2P	Hy90	Hy80
Sedan & Est. Car	'50	18P	—	—	V	11P	30	20	1½P	50	40	2P	Hy90	Hy80
VAUXHALL LIP (English)														
Velox	'49	16¾P	V	v	V-40°	5¼	20	10W	1¼P	90	80	2¾P	Hy90	Hy80
Velox	'50	16½	PV	v	V-40	5¼	20	10W	1¼P	90	80	2¾P	Hy90	Hy80
WILLYS														
Americar	'41	9½	17/16x9	1½x10	V-44 11/32x21/32	3⅛	30	20W	1	90	90	1	Hy90	Hy90
Americar	'42	9½	17/16x6½	1½x10	V-44 11/32x21/32	3⅛	30	20W	1	90	90	1	Hy90	Hy90
CJ-2A Univ. Jeep	'45	9½	—	—	V-42 11/32x21/32	3⅛	30	10W	2½	EP90	EP90	2	Hy90	Hy90
CJ-2A Uni. Jeep	'47	9½	—	—	V-42 11/32x21/32	3⅛	30	10W	2½	90	90	2	Hy90	Hy90
CJ-2A	'48	9	1½	1½	V	3⅛	30	20W	6T	90	80	2¾f	Hy90	Hy90
4-63	'48	9	1½	1½	V	3⅛	30	20W	2½T	90	80	2	Hy90	Hy90
2-WD	'48	9	1½	1½	V	3⅛	30	20W	3	90	80	3	Hy90	Hy90
4-WD	'48	9	1½	1½	V	3⅛	30	20W	6	90	80	3f	Hy90	Hy90
6-63	'48	8	1½	1½	V	4¼	30	20W	2½T	90	80	2	Hy90	Hy90
CJ-2A	'49	9¼	1½	1½	V	3⅛	30	20W	6t	90	80	2¾f	Hy90	Hy90
4 63	'49	9¼	1½	1½	V	3⅛	30	20W	2½t	90	80	2	Hy90	Hy90
2 WD	'49	2	1½	1½	V	3⅛	30	20W	3	90	80	2	Hy90	Hy90
4 WD	'49	2	1½	1½	V	3⅛	30	20W	6t	90	80	3f	Hy90	Hy90
6 63	'49	8¼	1½	1½	V	4¼	30	20W	2½T	90	80	2	Hy90	Hy90
CJ-3A	'49	9¼	1½	1½	V	3⅛	30	20W	6t	90	80	2¾f	Hy90	Hy90
4-73 Sta. Wgn.	'50	11	1½M	1½M	—	4	30	20z	1½P	90	80	2P	Hy90	Hy90
4x4-63 Sta. Wgn.	'50	11				4								
6-73 Sta. Wgn.	'50	9	1½M	1½M	—	5	30	20zz	1½P	90	80	2P	Hy90	Hy90
4-73 VJ Jeepster	'50	11	1½M	1½M	—	4	30	20zzz	1½P	90	80	2P	Hy90	Hy90
6-73 VJ Jeepster	'50	9	1½M	1½M	—	5	30	20zz	1½P	90	80	2P	Hy90	Hy90
WOLSELEY (English)														
Six-Eighty	'48-'50	10	1½IDx2⅞	1½IDx6½	V-32x.625	5	30	20R	2P	Hy90	Hy80	2¾P	Hy90	Hy80
Four-Fifty	'48-'50	7½	1½IDx2⅞	1½IDx6½	V-32x.625	3½	30	20R	1¾P	Hy90	Hy80	1.7P	Hy90	Hy80

ABBREVIATIONS

(a)—110° angle moulded.
(aa)—11.245.
A—43" outside diameter, 11/16" width, 7/16" thickness.
AA—19 up to serial No. 2A-1750 (Nov. 18/40); 21 all units after.
(bb)—9.165 pints.
BB—19 up to serial No. 2D-250 (Nov. 18/40); 21 all units after.
c—S.A.E. 20, 10°F to 60°F, S.A.E. 10, 10°F and down.
cc—Two pieces 1½" x 3½", 1½" x 5¾".
(cb)—Two pieces 1¾" x 4¼". Bypass 1¼" x 2".
(cc)—Two pieces 1½" x 3½", 1½" x 5¾". Bypass 1" x 1½".
(cd)—Two pieces 1½" x 3¼", 1½" x 5¾". Bypass 1" x 1½".
cxc—1½" x 3½", 1½" x 4¾".
C—Two pieces 1½" x 3½", 1½" x 5½".
(C)—Two pieces 1½" x 3½", 1½" x 5½". Bypass 1" x 1½".
(d)—Two pieces 1½" x 3", 1½" x 4⅝".
DD—Torpedo 6-5 qts; Deluxe 4¼ qts.
ee—Two pieces 1¾" x 3½", 1¾" x 4¼".
E—Elbow type.

EP—Extreme pressure.
ET—English type.
f—2½# front axle.
F—Formed tube.
g—Series 2000, 2200, 13½ qts. Radiator hose 1¾" x 13⅜". Upper hose 1¾" x 8$^{18}/_{16}$". Transmission capacity 1¼ pints. Rear axle capacity 3 pints.
GG—Torpedo 6-3¾ pounds; Deluxe 2¾ pounds.
HM—Hydramatic fluid.
Hy—Special hypoid lubricant.
i—Inside diameter 1⅛" x 4½" long.
I—Inside diameter.
m—80 below 10°F.
(m)—Inside diameter 1⅛" moulded bend.
(M)—Moulded.
N—Right 1¼" x 1⅜"; left 1¼" x 12⅜".
O—Outside diameter.
p—P17—1½" x 3½"; P18—1½" x 5½".
(p)—Pints—overdrive 1.83 pints.
(pp)—Two pieces 1¾" x 8".
P—Imperial pints.
(P)—36 pints 7 ozs.
q—Quarts.
qq—Two pieces 1½" x 3¼".
(q)—Two pieces 5⅛" x 2⅛".
(q)—Pints—overdrive 2.50 pints.
R—S.A.E. 10 below zero.
s—Oil grade recommended—SAE viscosity and temperature range—Lowest anticipated temperatures:
—10°F—SAE 10-10W or 10W
+10°F—SAE 20
+32°F—SAE 30
(s)—D30 rear axle oil capacity 3½ pounds.
S—Straight mineral gear oil.
SS—Two pieces 1¾" x 4½", 1¾" x 8".
t—If over 90°F 30.
(t)—Or —30.
(T)—Or 20.
U—U.S. measure.
v—Formed 2⅜", diameter lower end 1$^{5}/_{16}$". Top end approximate length 4⅝".
V—Bottom hose formed. 1$^{7}/_{16}$" diameter, approximate length 3¾". Top hose 1½" diameter. length 3⅝".
(w)—Windsor model 2½ pints.
x—S.A.E. 30 over 90 per cent or hard summer driving at high speeds.
(x)—Two used.
X—Right 13⅜", left 12⅜".
(X)—C45 seven passenger sedan 3½ pounds.
(y)—Overdrive 5.1 pints.
z—As low as 10°F—10W.
zz—As low as 22°F—SAE 20 or 20W.
As low as 10°F—SAE 20W.
As low as —10°F—SAE 10W.
zzz—20 or 20W 10°-32°F—10W.
(z)—Overdrive 5 pints.
*—Above 90°F use S.A.E. 40.
**—Special lubricant for Simplimatic transmission.
***—Series 2000, 2200-13½; series 2500-15; series 2500, 2700 2800-16.
†—With overdrive-3 pounds.
††—With overdrive-3¼ pounds.
‡‡—Above 32°F. S.A.E. 20 or 20W.
As low as 10°F.-20W.
As low as—10°F.-10W.
Lower than —10°F. 10W plus 10 percent kerosene (colorless, refined).
‡‡‡—With overdrive 3½ pounds.
∅—Plus 10W engine oil.
§—Transmission oil. Alternatives-Engine oil S.A.E. 70 (summer) S.A.E. 50 (winter).
§§—Standard transmission only. 2½ pts. (refill 4 pts. if dry.) Hydra-Matic 10⅜ quarts. Cadillac Hydra-Matic Fluid only. pints. Engine oil all weather No. 10W.
$—Plus one quart filter absorption.
¶—2126 Model 130° Angle Moulded.

OIL FILTERS

Make and Model	Year	Filter Equipment
ANGLIA (English)		
Four Cylinder	'49	*2
AUSTIN (English)		
A. 40	'48	*2
BUICK		
Sp. 44; Sup. 45	'41	*1
Series 46, 47	'41	*1
Series 49	'41	*1
Series 44	'42	*1
Series 46	'42	*1
Series 50	'46	0
Series 70	'46	0
Series 40	'47	0
Series 50	'47	0
Series 70	'47	0
CADILLAC		
All Series	'41	*3
All Series	'42	*3
V-8	'46	0
V-8	'47	0
CHEVROLET		
Six	'41	0
Six	'42	0
Six	'46	0
Six	'47	0
Six	'48	0
Six	'49	0
CHRYSLER		
Royal 6 C-28	'41	*2
N.Y. 8 C-30	'41	*2
Cr. Imp. C-33	'41	*2
Royal 6 C-34	'42	*2
N.Y. 8 C-36	'42	*2
Cr. Imp. C-37	'42	*2
C-38W, C-38S	'46	*2
Six C-38W, C-38S	'47	*1
Eight C-39, C-40	'47	*1
C-38W, C-38S	'48	*1
C-39, C-40	'48	*1
Six C-45	'49	*1
Eight C-46, C-47	'49	*1
CROSLEY		
CC (Up to 41547)	'47	*2
CC,CD to 106039	'48	*2
CD After 106039	'49	*2
DE SOTO		
Six S-8	'41	*2
Six S-10	'42	*2
S-11	'46	*2
S-11	'47	*2
S-11	'48	*2
S-13 Custom	'49	*2
DODGE		
Kings. 6 D-20	'41	*2
De L. 6 D-21	'41	*2
L. Liner D-19	'41	*2
De Luxe D-23	'42	*2
Custom D-22	'42	*2
D-24	'46	*2
D-25	'46	*2
D-25	'47	*2
D-24	'47	*2
D-25	'48	*2
D 24	'48	*2
D-30	'49	*2
D31, D32	'49	*2
FORD		
V-8 85	'41	*3
V-8 85	'42	*3
De Luxe	'46	*1
Super De Luxe	'46	*1
DeL. & Sup. DeL	'47	*1
DeL. & Sup. DeL	'48	*1
V-8	'49	*1
FRASER		
F-47	'47	*1
F-47,47C,485,486	'48	*1
F-495, 496	'49	*1
HILLMAN MINX (Eng.)		
Mark III	'49	0
Mark IV	'50	0
HUDSON		
Six-10	'41	*4
Six-11, 12, 18	'41	*4
Eight	'41	*4
"6"-20	'42	*4
"6"-18, 21, 22	'42	*4
Eights	'42	*4
Six-51, 52	'46	*4
Eight-53, 54	'46	*4
Six-171, 172	'47	*4
Eight-173, 174	'47	*4
Series 481, 482	'48	*3
Series 483, 484	'48	*4
Series 491, 492	'49	*3
Series 493, 494	'49	*4
HUMBER HAWK (Eng.)		
Mark III	'49	*1
KAISER		
K-100	'47	*1
K100,101,481,482	'48	*1
Series K-491, 492	'49	*1
LINCOLN		
Continental	'41	*1
Linc.&Linc.Cont.	'47	*1
Linc.&Linc.Cont.	'48	*1
MERCURY		
Mercury	'41	*1
Mercury	'42	*1
114 & 114X	'46	*1
118	'46	*1
114, 114X & 118	'47	*1
114, 114X & 118	'48	*1
Mercury	'49	*1
METEOR		
Meteor	'49	*1
M.G. (English)	'49	*2
MONARCH		
Monarch	'46	*1
Monarch	'47	*1
MONARCH (Cont.)		
Monarch	'48	*1
Monarch	'49	*1
MORRIS (English)		
Morris	'49	*2
NASH		
Ambassador 600	'41	0
Ambassador 6	'41	*2
Ambassador 8	'41	*2
4240-"6"	'42	0
4260-"6"	'42	*2
4280-"8"	'42	*2
Series 4640	'46	0
Series 4660	'46	*2
Series 4640	'47	0
Series 4660	'47	*2
Series 4840	'48	0
Series 4860	'48	*2
Series 4940	'49	0
Series 4960	'49	*2
All	'50	0
OLDSMOBILE		
Six	'41	0
Eight	'41	0
Six	'42	0
Eight	'42	0
Six	'46	0
Eight	'46	*1
Six	'47	0
Eight	'47	*1
Six	'48	0
Eight	'48	*1
Six	'49	0
Eight	'49	*1
PACKARD		
110	'41	*1
120	'41	*1
Super 8	'41	*1
"6"-2000	'42	*1
"8"-2001	'42	*1
Sup. 8-2003, 6	'42	*1
2100	'46	*1
2101 & 2111	'46	*1

For key to abbreviations see page 148

OIL FILTERS

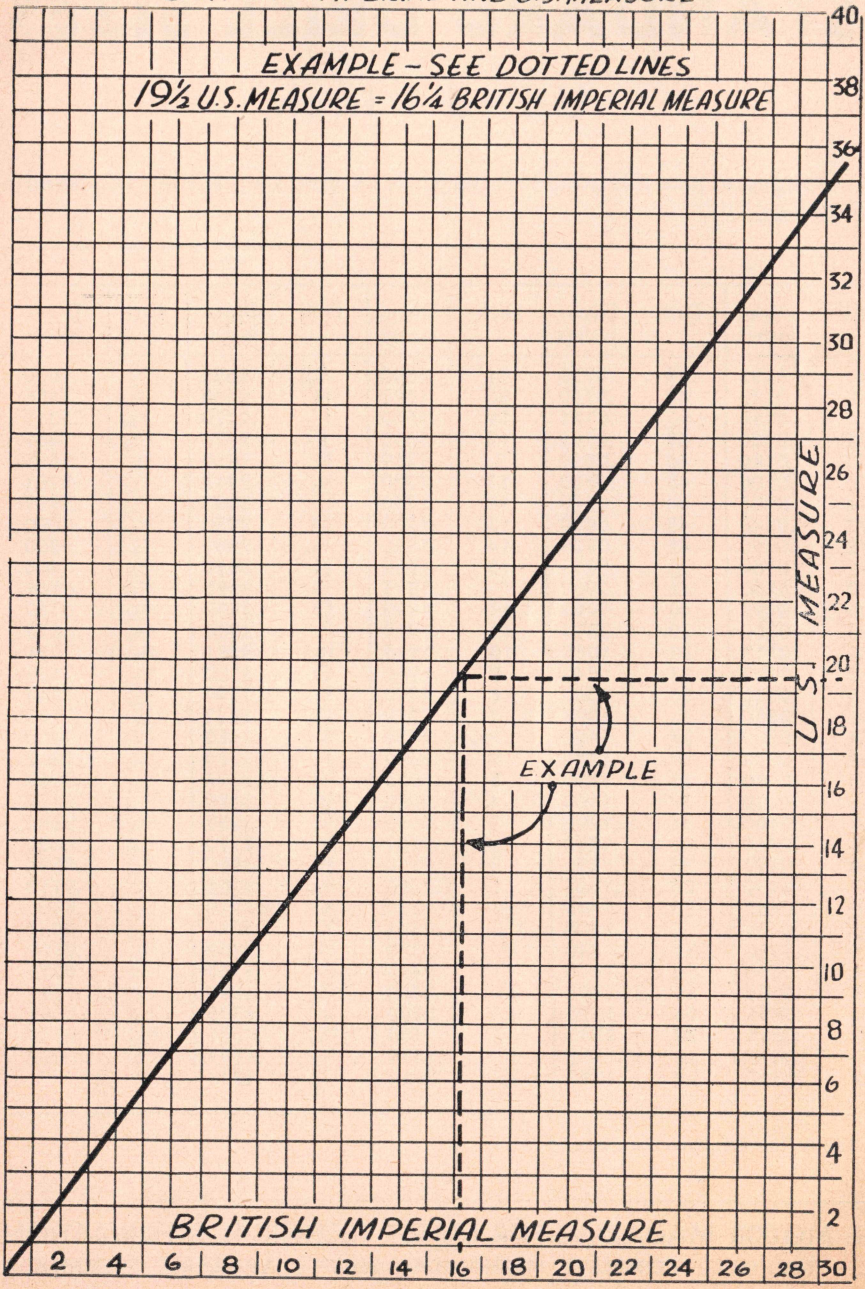
Make and Model	Year	Filter Equipment
PACKARD (Cont.)		
2103 & 2126	'46	*1
2100 & 2130	'47	*4
2101 & 2111	'47	*4
2103,2106&2126	'47	*1
2201, 2211	'48	*4
2202, 2232 (a)	'48	*1
2206, 2233 (b)	'48	*1
2301	'49	*4
2302, 2332	'49	*1
2306, 2333	'49	*1
Taxi	'49	*1
PLYMOUTH		
Roadking P-11	'41	*2
DeLuxe P-12	'41	*2
DeLuxe P-14	'42	*2
P-15	'46	*2
P-15	'47	*2
P-15	'48	*2
P17, P-18	'49	*2
PONTIAC		
Fleetleader	'41	0
Torpedo 6	'41	0
Fleetleader 6	'42	0
Tor. 6 & De L.	'42	0
Six	'46	0
Eight	'46	0
Six	'47	0
Eight	'47	0
Six	'48	0
Eight	'48	0
Six 2000, 2200, 2500	'49	0
Eight	'49	0
PREFECT (English)		
Four Cylinder	'49	*2
STUDEBAKER		
Com. 6-11A	'41	*1
STUDEBAKER (Cont.)		
Pres. 8-7C	'41	*1
Champ. 6-3G	'41	0
Com. 6-12A	'42	*1
Pres. 8-8C	'42	*1
Champ 6-4G	'42	0
Skyway 5G	'46	0
Champ 6G	'47	0
Com. 14A	'47	*1
Champion 7G	'48	0
Commander 15A	'48	*1
Champion 8-G	'49	0
Commander 16A	'49	*1
VANGUARD (English)		
Sedan & Est. car	'49	*1
VAUXHALL LIP (Eng.)		
Velox	'49	*2
WILLYS		
Americar	'41	*2
Americar	'42	*2
C1-2A Univ. Jeep	'45	*1
CJ-2A Uni. Jeep	'47	*1
CJ-2A	'48	*1
4-63	'48	0
2 WD	'48	0
4 WD	'48	0
6-63	'48	0
CJ-2A	'49	*1
4 63	'49	0
2 WD	'49	0
4 WD	'49	0
6 63	'49	0
CJ-3A	'49	*1

ABBREVIATIONS

0—None equipped
*1—Replaceable cartridge filter
*2—Throw-away type filter
*3—Partial filter
*4—Optional filter

CONVERSION CHART – LIQUIDS

BRITISH IMPERIAL AND U.S. MEASURE



STANDARD DRILL SIZES

Up to 1 Inch

On special jobs it is good to have drills varying by just a few thousandths of an inch.

Drill	Diam. Inches	Drill	Diam. Inches	Drill	Diam. Inches	Drill	Diam. Inches	Drill	Diam. Inches
80	.0135	49	.0730	21	.1590	17/64	.2656	1/2	.5000
79	.0145	48	.0760	20	.1610	H	.2660	33/64	.5156
1/64	.0156	5/64	.0781	19	.1660	I	.2720	17/32	.5312
78	.0160	47	.0785	18	.1695	J	.2770	35/64	.5469
77	.0180	46	.0810	11/64	.1719	K	.2810	9/16	.5625
76	.0200	45	.0820	17	.1730	9/32	.2812	37/64	.5781
74	.0225	44	.0860	16	.1770	L	.2900	19/32	.5937
73	.0240	43	.0890	15	.1800	M	.2950	39/64	.6090
72	.0250	42	.0935	14	.1820	19/64	.2969	5/8	.6250
71	.0260	3/32	.0937	13	.1850	N	.3020	41/64	.6406
70	.0280	41	.0960	13/16	.1875	5/16	.3125	21/32	.6562
69	.0292	40	.0980	12	.1890	O	.3160	43/64	.6719
68	.0310	39	.0995	11	.1910	P	.3230	11/16	.6875
1/32	.0313	38	.1015	10	.1935	21/64	.3281	45/64	.7031
67	.0320	37	.1040	9	.1960	Q	.3320	23/32	.7187
66	.0330	36	.1065	8	.1990	R	.3390	47/64	.7344
65	.0350	7/64	.1094	7	.2010	11/32	.3437	3/4	.7500
64	.0360	35	.1100	13/64	.2031	S	.3480	49/64	.7656
63	.0370	34	.1110	6	.2040	T	.3580	25/32	.7812
62	.0380	33	.1130	5	.2055	23/64	.3594	51/64	.7969
61	.0390	32	.1160	4	.2090	U	.3680	13/16	.8125
60	.0400	31	.1200	3	.2130	3/8	.3750	53/64	.8281
59	.0410	1/8	.1250	7/32	.2187	V	.3770	27/32	.8437
58	.0420	30	.1285	2	.2210	W	.3860	55/64	.8594
57	.0430	29	.1360	1	.2280	25/64	.3906	7/8	.9750
56	.0465	28	.1405	A	.2340	X	.3970	57/64	.8906
3/64	.0469	9/64	.1406	15/64	.2344	Y	.4040	29/32	.9062
55	.0520	27	.1440	B	.2380	13/32	.0462	59/64	.9219
54	.0550	26	.1470	C	.2420	Z	.4130	15/16	.9375
53	.0595	25	.1495	D	.2460	27/64	.4219	61/64	.9531
1/16	.0625	24	.1520	E	.2500	7/16	.4375	31/32	.9687
52	.0635	23	.1540	1/4	.2500	29/64	.4531	63/64	.9844
51	.0670	5/32	.1562	F	.2570	15/32	.4687	1	1.0000
50	.0700	22	.1570	G	.2610	31/64	.4843		

*—Tap Drills—For Sizes See Page 151.

TAP DRILL SIZES

The Society of Automotive Engineers recommends the use of drills of such a size as to leave from 75 per cent to 83 1–3 per cent of a full thread. The threads do not come to a sharp point, but have the "V" flattened a certain amount. The clearance prevents binding of the top and bottom of the threads. For average shop work use a drill that will leave about 75 per cent of a full thread.

NATIONAL COARSE THREAD SIZES

Tap Size	Threads Per Inch	Tap Size Drill	Percent Thread
No 6	32	No. 36	78
No 8	32	No. 29	70
No. 10	24	No. 25	75
No. 12	24	No. 16	72
1/ 4"	20	No. 7	75
5/16"	18	F*	77
3/ 8"	16	5/16	77
7/16"	14	U*	75
1/ 2"	13	27/64	78
9/16"	12	31/64	72
5/ 8"	11	17/32	80
3/ 4"	10	21/32	72

*—Letter Drills—For Sizes See Page 150.

TABLE OF PER CENTS. AND VALUES IN DECIMALS AND FRACTIONS

Per Cent	Decimal	Fraction	Per Cent	Decimal	Fraction
1	.01	1/100	150	1.50	150/100 or 1 1/2
2	.02	2/100 or 1/50	500	5.00	500/100 or 5
5	.05	5/100 or 1/20	1/4	.0025	1/4/100 or 1/400
10	.10	10/100 or 1/10	1/2	.005	1/2/100 or 1/200
25	.25	25/100 or 1/4	1 1/2	.015	1 1/2/100 or 3/200
50	.50	50/100 or 1/2	8 1/3	.08 1/3	8 1/3/100 or 1/12
75	.75	75/100 or 3/4	12 1/2	.125	12 1/2/100 or 1/8
100	1.00	100/100 or 1	16 2/3	.16 2/3	16 2/3/100 or 1/6
125	1.25	125/100 or 1 1/4	62 1/2	.625	62 1/2/100 or 5/8

TAP DRILL SIZES

NATIONAL FINE THREAD SIZES

Tap Size	Threads Per Inch	Tap Size Drill	Percent Thread
No. 6	40	No. 33	77
No. 8	36	No. 29	78
No. 10	32	No. 21	76
No. 12	28	No. 14	73
1/ 4"	28	No. 3	80
5/16"	24	I*	75
3/ 8"	24	Q*	79
7/16"	20	25/64	72
1/ 2"	20	29/64	72
9/16"	18	33/64	65
5/ 8"	18	37/64	65
3/ 4"	16	11/16	77

*—Letter Drills—For Sizes See Page 150

SERVICE OPERATION TIME SCHEDULE

IN ORDER that the automotive technician may have all the required data available under one cover, MOTOR MAGAZINE'S Canadian Service Data Book includes a Flat Rate Time Schedule which contains estimated service operation time allowances for some of the most common jobs on passenger cars of the three major Canadian manufacturers.

Additions to this section will be made in future editions of Canadian Service Data Book, with complete coverage of all service operations on all cars sold and serviced in Canada.

The proper use of the service operation time schedule should increase the efficiency of any service department or garage. It may be used as a guide in determining job time allocations; also, time required for service operations may be quoted to the customer with service prices stated in advance.

The service charge for each operation is determined by multiplying the hourly rate by the number of hours and tenths of an hour required to complete the work. One tenth hour 0.1 equals 6 minutes. Ten tenths, 1.0, equals 60 minutes.

The time estimates shown in the schedule are based on the assumption that the mechanic works according to the instruction in the manufacturer's repair manual and that all the necessary tools are available and in good working order. The time includes all preparations to do the work; getting the necessary tools together for the job; securing the necessary parts for replacement; also, checking, inspection or road testing of the completed job.

FLAT RATE DATA—ENGINE

Operation Number	CHRYSLER	Plymouth	Dodge	Chrysler	De Soto	Time	Price
C-444	ENGINE PERFORMANCE INSPECTION—Includes: Check battery and line voltage, vacuum test, compression test, condenser test, coil test	ALL	ALL	C-38 C-39	ALL	.7 .9	
C-445	ENGINE TUNE UP—(MINOR)—Includes: Clean and adjust—spark plugs, adjust breaker points, check distributor cap and rotor, inspect distributor wires, reset ignition timing, clean air cleaner, fuel bowls and adjust carburetor idle	ALL	ALL	C-38 C-39	ALL	.9 1.1	
C-446	ENGINE TUNE UP—(MAJOR)—Includes Check with vacuum gauge, check battery voltage, clean and tighten battery cables and ground straps, tighten cylinder head and manifold studs, test vacuum, test compression, dress breaker points and adjust, check high tension and primary circuits for leaks, check distributor cap and rotor for cracks, clean and adjust spark plugs, set ignition timing, check coil, condenser and ignition wires, check and adjust generator charging rate. Examine all head light bulbs and refocus, check tail lamp bulbs, disconnect and blow out main fuel lines, clean fuel pump bowl, clean and reoil air cleaner, check fuel level and adjust carburetor, check windshield wiper, final check with vacuum gauge and road test	ALL	ALL	C-38 C-39	ALL	3.0 3.2	
C-447	IF NECESSARY TO ADJUST TAPPETS: (ADD)	ALL	ALL	C-38 C-39	ALL	1.1 1.3	
C-449	ADJUST TAPPETS	ALL	ALL	C-38 C-39	ALL	1.3 1.5	

Operation Number	FORD	Ford	Mercury	Monarch	Time	Price
MA-1-A	MAINTENANCE INSPECTION—1000 mile inspection preventive maintenance and lubrication. Follow operations as outlined in the Service Bulletin opr. MA-1-A. Includes Check battery and connections, check lighting system, check exhaust system. Check wheels and tires, check steering connections, check carburetor adjustment, check clutch and brake pedal adjustments, check windshield wiper, check cooling system, tighten transmission and rear axle housing bolts, tighten electrical connections at generator, regulator, starting motor relay, coil, and distributor, clean spark plug porcelains, and adjust belts, plus all complete 1000 mile lubrication (extra charge for lubricant and material)		(A cars)		0.8	
MA-1-B	MAINTENANCE INSPECTION—5000 mile inspection, preventive maintenance and lubrication. Follow operations as outlined in Service Bulletin opr. MA-1-B. Includes a complete engine tune up, adjust service brakes, adjust hand brake, adjust toe-in, check clutch, tighten and adjust steering gear, adjust belts, align headlights, tighten rear axle housing bolts, tighten transmission housing bolts, tighten oil pan, tighten all electrical connections, inspect fuel system, adjust carburetor, inspect and tighten exhaust and intake systems, inspect and tighten springs, inspect and tighten cooling system, check operation of window lifts, align door striker plates and dovetails, and many other operations plus a complete 5000 mile lubrication (extra charge for lubricant and materials)		(A Ford, Monarch and Mercury cars) (A commercial cars)		5.0 5.0	
F-30	ENGINE TUNE-UP—(MAJOR)—Includes: Overhaul distributor, carburetor and fuel pump. Clean and adjust plugs. Tighten cylinder heads and manifolds. Clear air cleaners. Check starter generator and wiring	ALL	ALL	ALL	3.9	
F-10	ENGINE TUNE-UP—(MINOR)—Includes: Clean and adjust points and plugs. Adjust carburetor idle	ALL	ALL	ALL	1.0	

Operation Number	GENERAL MOTORS	Chevrolet	Pontiac	Oldsmobile	Buick	Time	Price
6-10	ENGINE — (TUNE COMPLETELY) — Includes: Test compression; clean and adjust spark plugs; test coil and consenser; clean and adjust distributor points; clean and inspect high tension wires and distributor cap; inspect, clean and tighten battery terminals, cables and connections; test and correct ignition timing and generator circuits for voltage drop; inspect and clean starting motor commutator and brushes; check operation of starting motor and switch; inspect and clean generator commutator and brushes; check and free up manifold heat valve; (Does not include removing manifold); adjust fan belt; tighten hose connections; inspect water pump for leaks; test operation of throttle and choke control; clean and re-oil carburetor and crankcase air cleaner; clean choke and fuel bowl filters; tighten fuel line connections clean fuel pump screen; warm upengine; set timing; torque cylinderhead and manifold bolts; adjust current and voltage regulator; adjust valve tappets; and adjust (carburetor) idle.	ALL	6 cyl 8 cyl	6 cyl 8 cyl	ALL	3.0 3.5 4.0 3.5 4.0 3.5	
6-1	ENGINE—(IGNITION AND CARBURETOR)—ADJUST—Includes: Clean and adjust Spark plugs and breaker points, set ignition timing, adjust carburetor idle, remove, clean and replace carburetor air cleaner.	ALL	6 cyl 8 cyl	6 cyl 8 cyl	ALL	.8 .9	

FLAT RATE DATA—VALVES

Operation Number	CHRYSLER	Plymouth	Dodge	Chrysler	De Soto	Time	Price
C-553	GRIND VALVES, RESEAT INSERTS and TUNE ENGINE (COMPLETE)	ALL	ALL	C-38 C-39	ALL	8.0 10.8	
C-554	REFACE VALVES ALL (REMOVED)	ALL	ALL	C-38 C-39	ALL	.8 1.0	
C-555	GRIND VALVES, RESEAT INSERTS and TUNE ENGINE—With any operation where cylinder head is off	ALL	ALL	C-38 C-39	ALL	6.8 8.6	
C-557	REPLACE INSERT WITH VALVE GRIND (EACH) (ADD)	ALL	ALL	ALL	ALL	.3	
C-559	REPLACE VALVE GUIDE WITH VALVE GRIND (EACH) (ADD)	ALL	ALL	ALL	ALL	.3	
C-561	REPLACE CYLINDER HEAD OR GASKET	ALL	ALL	C-38 C-39	ALL	2.1 2.6	
C-563	REPLACE BROKEN STUD—When Cylinder head is off	ALL	ALL	ALL	ALL	.5	
C-567	REPLACE TWO VALVE COVER PLATES or GASKETS	ALL	ALL	ALL	ALL	.8	
C-569	REPLACE VALVE SPRING—Includes: Remove cylinder head and remove carbon (one)	ALL	ALL	C-38 C-39	ALL	3.0 4.3	

Operation Number	FORD	Ford	Mercury	Monarch	Time	Price
F-60	VALVES—GRIND—Includes: Overhaul distributor	ALL	ALL	ALL	6.6	
F-60A	VALVES—GRIND (heads off)—Includes: Overhaul distributor	ALL	ALL	ALL	4.6	
F-70	VALVES, REFACE (Valves Out) (EACH)	ALL	ALL	ALL	.1	
F-100	VALVE SPRINGS—(RENEW)	ALL	ALL	ALL	4.1	
F-100A	VALVE SPRING (ONE) (RENEW)	ALL	ALL	ALL	3.2	
F-110	VALVE COVER GASKETS, (RENEW)	ALL	ALL	ALL	1.0	
F-80	CYLINDER HEAD—(REMOVE AND REPLACE OR RENEW)					
	(ONE HEAD)	ALL	ALL	ALL	1 3	
	(BOTH HEADS)	ALL	ALL	ALL	2.0	
F-90	CYLINDER HEAD GASKET, (RENEW)					
	(ONE)	ALL	ALL	ALL	1.3	
	(BOTH)	ALL	ALL	ALL	2.0	

Operation Number	GENERAL MOTORS	Chevrolet	Pontiac	Oldsmobile	Buick	Time	Price
6-5	VALVE TAPPETS—ADJUST—ENGINE RUNNING—Includes: Warm up engine before lashing valves	ALL				.9	
			6 cyl	6 cyl		1.3	
			8 cyl	8 cyl		1.4	
					ALL	1.1	
6-300	VALVE GRIND—Includes: Remove valve spring and check, remove, reface, reseat and grind valves, tune operation 6-1	ALL				5.6	
			6 cyl			6.5	
			8 cyl			7.8	
				6 cyl		6.6	
				8 cyl		7.9	
					ALL	7.3	
6-42	CYLINDER HEAD—REMOVE AND REPLACE OR REPLACE GASKET—Includes: Clean carbon and spark plugs. Heat engine for tightening, adjust tappets valve-in-head jobs	ALL				3.0	
			6 cyl	6 cyl		1.6	
			8 cyl	8 cyl		1.9	
					ALL	4.0	
6-40	CYLINDER HEAD—TIGHTEN WITH TORQUE WRENCH—Includes: Adjust tappets on valve-in-head engines	ALL				.9	
			ALL	ALL		3	
					ALL	1.1	
6-45	CYLINDER HEAD—VALVE-IN-HEAD-ENGINES—INSTALL NEW—Includes: Change over all parts, recondition and adjust valves—tune operation 6-1	ALL				5.8	
					ALL	7.7	
6-B	GRIND VALVES—(AT TIME OF TUNE-UP)	ALL				3.9	
Combination)			6 cyl			4.4	
			8 cyl			5.5	
				6 cyl		4.5	
				8 cyl		5.5	
					ALL	5.3	
6-C	GRIND VALVES—(HEAD REMOVED)	ALL				2.1	
Combination)			6 cyl	6 cyl		4.0	
			8 cyl	8 cyl		5.0	
					ALL	3.0	

FLAT RATE DATA—PISTON RINGS

Operation Number	CHRYSLER	Plymouth	Dodge	Chrysler	De Soto	Time	Price
C-583	PISTON RINGS (REPLACE)—Tune engine (minor) and adjust tappets	ALL	ALL	C-28 C-38-C-34 C-30 C-36-C-37 C-39	ALL	9.1 11.3	

Operation Number	FORD	Ford	Mercury	Monarch	Time	Price
6149-A	PISTON RINGS (REPLACE)—Includes remove carbon (opr. 6050-G) and remove and clean oil pan and oil pump. (opr. 6600-B. (If equipped with aluminum cylinder heads add 1.0 hrs. for V-8 and 1.5 hrs. for V-12)		(A 60 h.p. engines) (V-8 engines—1932-34) (V-8 engines—1935-40) (V-8 engines—1941-47)		8.5 8.5 9.0 8.0	

Operation Number	GENERAL MOTORS	Chevrolet and Pontiac 22-22S 1940	Pontiac except 22-22S 1940	Oldsmobile	Buick
6-110	PISTON RINGS—(ALL)—REPLACE Includes clean carbon—align and adjust connecting rods—tune oper. 6-1. COMBINATIONS 6-C to 6-E, 6-H	9.0	6 Cy. 7.0 8 Cy. 9.0	6 Cy. 7.1 8 Cy. 8.6	11.1
6-115	PISTON RINGS—(ONE PISTON)—REPLACE	5.2	6 Cy. 4.0 8 Cy. 5.0	6 Cy. 4.1 8 Cy 4.6	6.2
	For each additional piston—Add	.5	.4	.4	.5

FLAT RATE DATA—CLUTCH OVERHAUL

Operation Number	CHRYSLER	Plymouth	Dodge	Chrysler	Desoto	Time	Price
C-203	CLUTCH DISC OVERHAUL (WITH FLUID DRIVE AND SIMPLIMATIC TRANSMISSION VACUUM OR HYDRAULIC)—(REPLACE)	—	—	C-28–C-34 C-36–C-37 C-38–3-C9	S-8–S-10 S-11	3.1	
C-204	CLUTCH DISC OVERHAUL (WITH FLUID DRIVE AND O.D.) (REPLACE)			C-30	—	2.9	
C-204a	CLUTCH DISC OVERHAUL (TRANSMISSION REMOVED) (REPLACE)	ALL	ALL	ALL	ALL	.6	

Operation Number	FORD	Ford	Mercury	Monarch	Time	Price
7563-B	CLUTCH DISC OVERHAUL—Change clutch disc or pressure plate. Add opr. 6675-A or 6675-B if necessary to remove engine oil pan. Time is controlled by method required in various units.		(By removing V-8 engine) (By moving rear axle back except Ford and Mercury—1941-42) (By removing jack shaft)		4.4 3.5 2.5	

Operation Number	GENERAL MOTORS	Chevrolet	Pontiac	Oldsmobile	Buick	Time	Price
6-710	CLUTCH DISC OVERHAUL, (REPLACE) COMBINATIONS 6-L, 6-Q, 6-R		3.7	20, 22 Others	3.4 2.5	2.5	5.2

FLAT RATE DATA—TRANSMISSION

Operation Number	CHRYSLER	Plymouth	Dodge	Chrysler	De Soto	Time	Price
C-1012	TRANSMISSION (Conventional Type) (RECONDITION)—Includes remove and install	ALL	ALL	C-28–C-30 C-34–C-38	S-8–S-10	4.2	
C-1013	TRANSMISSION AND O.D. (RECONDITION)—Includes—remove and install			C-30	—	5.9	
C-1014	TRANSMISSION (RECONDITION) Simplimatic (Vacuum operated). Includes—remove and install			C-28–C-34 C-36–C-37	S-8–S-10	5.5	
C-1015	TRANSMISSION (RECONDITION) Simp imatic (Hydraulic operated). Includes—remove and i nstall			C-38–C-39	S-11	4.5	
C-1016	TRANSMISSION (RECONDITION) (CONVENTIONAL TYPE) (Removed)	ALL	ALL	C-28–C-30 C-34–C-38	S-8–S-10	2.6	
C-1017	TRANSMISSION (RECONDITION) SIMPLIMATIC (VACUUM OPERATED) (Removed)			C-28–C-34 C-36–C-37	S-8–S-10	4.0	
C-1018	TRANSMISSION (RECONDITION) SIMPLIMATIC HYDRAULIC OPERATED (Removed)			C-38–C-38 C-38–C-39	S-11 S-11	3.0 4.5	
	(VACUUM OPERATED). Includes—remove and install						
C-1015	TRANSMISSION (RECONDITION) SIMPLIMATIC (HYDRAULIC OPERATED). Includes—remove and install						

Operation Number	FORD	Ford	Mercury	Monarch	Time	Price
7000-A	TRANSMISSION (RECONDITION)—Recondition transmission and clutch when necessary to remove engine from chassis. Add opr. 6600-C if necessary to remove oil pan. A Ford, Monarch and Mercury V-8 engines.				6.4	
7000-B	TRANSMISSION (RECONDITION)—Recondition transmission and clutch when not necessary to remove the engine from chassis. Add opr. 6675-A if necessary to remove engine oil pan. Time is controlled by method required in various units.		(By moving car axle back except Ford and Mercury 1941-42 (By removing jack shaft)		5.5 4.5	
7000-C	TRANSMISSION (RECONDITION)—Recondition transmission and clutch when engine has already been removed for other work. Add opr. 6675-B if necessary to remove engine oil pan for truck clutch.		(All models)		2.5	
7000-D	TRANSMISSION (RECONDITION)—Recondition transmission when brought in.		(All models)		1.5	
MA-533-B	TRANSMISSION LUBRICANT—Change lubricant in transmission including flushing (extra charge for lubricant and flushing material).		(All model cars and trucks (including C.O.E.)		0.2	

Operation Number	GENERAL MOTORS	Chevrolet	Pontiac	Oldsmobile	Buick	Time	Price
7—5	TRANSMISSION (ASSEMBLY) (OVERHAUL)—Includes—Remove and replace transmission, overhaul universal joint, torque tube drive	Vacuum shift	5.2		4.3	4.3	7.6
		Manual shift	4.9				
7—7	TRANSMISSION (ASSEMBLY) (OVERHAUL)—Removed		2.7		2.8	2.8	3.4

A HANDY CONVERSION CHART

IN HOURS AND TENTHS TO DOLLARS AND CENTS

Hrs.	$1.50	$1.60	$1.75	$2.00
.2	.30	.35	.35	.40
.5	.75	.80	.90	1.00
.7	1.05	1.15	1.25	1.40
1	1.50	1.60	1.75	2.00
1.2	1.80	1.95	2.15	2.40
1.5	2.25	2.40	2.65	3.00
1.7	2.55	2.75	3.00	3.40
2	3.00	3.20	3.50	4.00
2.2	3.30	3.55	3.85	4.40
2.5	3.75	4.00	4.40	5.00
2.7	4.05	4.35	4.75	5.40
3	4.50	4.80	5.25	6.00
3.2	4.80	5.15	5.60	6.40
3.5	5.25	5.60	6.15	7.00
3.7	5.55	5.95	6.50	7.40
4	6.00	6.40	7.00	8.00
4.2	6.30	6.75	7.35	8.40
4.5	6.75	7.20	7.90	9.00
4.7	7.05	7.55	8.25	9.40
5	7.50	8.00	8.75	10.00
5.2	7.85	8.35	9.15	10.40
5.5	8.25	8.80	9.65	11.00
5.7	8.55	9.15	10.00	11.40
6	9.00	9.60	10.50	12.00
6.2	9.30	9.95	10.85	12.40
6.5	9.75	10.40	11.40	13.00
6.7	10.05	10.75	11.75	13.40
7	10.50	11.20	12.25	14.00
7.2	10.80	11.55	12.60	14.40
7.5	11.25	12.00	13.15	15.00
7.7	11.55	12.35	13.50	15.40
8	12.00	12.80	14.00	16.00
8.2	12.30	13.15	14.35	16.40
8.5	12.75	13.60	14.90	17.00
8.7	13.05	13.95	15.25	17.40
9	13.50	14.40	15.75	18.00
9.2	13.85	14.75	16.15	18.40
9.5	14.25	15.20	16.65	19.00
9.7	14.55	15.55	17.00	19.40
10	15.00	16.00	17.50	20.00
11	16.50	17.60	19.25	22.00
12	18.00	19.20	21.00	24.00
13	19.50	20.80	22.75	26.00
14	21.00	22.40	24.50	28.00
15	22.50	24.00	26.25	30.00
16	24.00	25.60	28.00	32.00
17	25.50	27.20	29.75	34.00
18	27.00	29.80	31.50	36.00
19	28.50	30.40	33.25	38.00
20	30.00	32.00	35.00	40.00
21	31.50	33.60	36.75	42.00
22	33.00	35.20	38.50	44.00
23	34.50	36.80	40.25	46.00
24	36.00	38.40	42.00	48.00
25	37.50	40.00	43.75	50.00
26	39.00	41.60	45.50	52.00
27	40.50	43.20	47.25	54.00
28	42.00	44.80	49.00	56.00
29	43.50	46.40	50.75	58.00
30	45.00	48.00	52.50	60.00
31	46.50	49.60	54.25	62.00
32	48.00	51.20	56.00	64.00
33	49.50	52.80	57.75	66.00
34	51.00	54.40	59.50	68.00
35	52.50	56.00	61.25	70.00
36	54.00	57.60	63.00	72.00
37	55.50	59.20	64.75	74.00
38	57.00	60.80	66.50	76.00
39	58.50	62.40	68.25	78.00
40	60.00	64.00	70.00	80.00
41	61.50	65.60	71.75	82.00
42	63.00	67.20	73.50	84.00
43	64.50	68.80	75.25	86.00
44	66.00	70.40	77.00	88.00
45	67.50	72.00	78.75	90.00
46	69.00	73.60	80.50	92.00
47	70.50	75.20	82.25	94.00
48	72.00	76.80	84.00	96.00
49	73.50	78.40	85.75	98.00
50	75.00	80.00	87.50	100.00
51	76.50	81.60	89.25	102.00
52	78.00	83.20	91.00	104.00
53	79.50	84.80	92.75	106.00
54	81.00	86.40	94.50	108.00
55	82.50	88.00	96.25	110.00
56	84.00	89.60	98.00	112.00
57	85.50	91.20	99.75	114.00
58	87.00	92.80	101.50	116.00
59	88.50	94.40	103.25	118.00
60	90.00	96.00	105.00	120.00

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CANADIAN SERVICE DATA BOOK—1951

ADVERTISERS' INDEX

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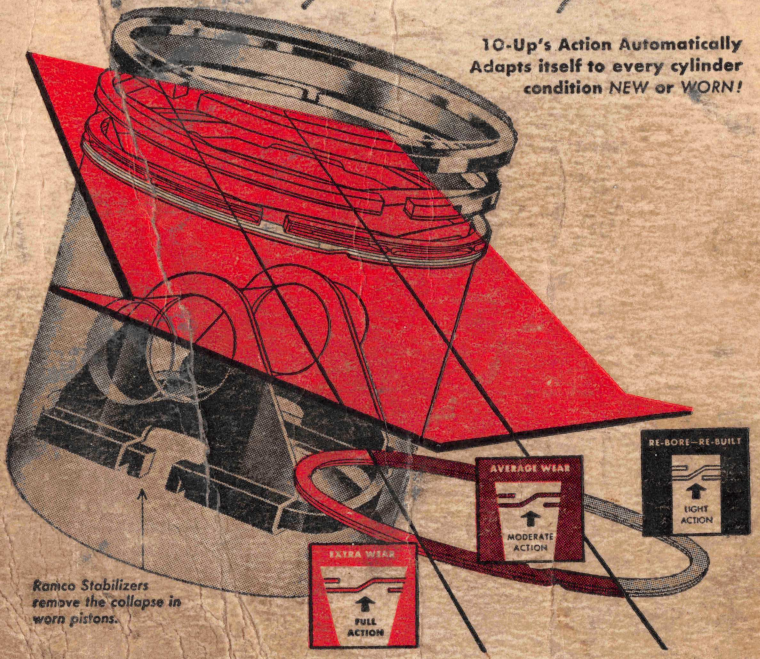

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